

Memory Camcorder user manual

VP-MX10
VP-MX10P
VP-MX10H
VP-MX10A
VP-MX10AU
VP-MX10AH



imagine the possibilities

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SAMSUNG

key features of your memory camcorder

MPEG4 Encoding

Records enhanced quality video in MPEG4 ASP(Advanced Simple Profile) format (720 x 576) onto memory cards at 25 fps for high resolution, life-like images.

High-capacity embedded Flash Memory (4GB) (VP-MX10A/MX10AU/MX10AH only)

The camcorder has built-in high capacity flash memory that allows you to record movie images.

Various Recording Media

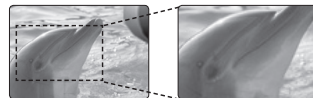
In addition to the built-in flash memory (VP-MX10A/MX10AU/MX10AH only), this memory camcorder supports various storage media like SDHC (Secure Digital High Capacity) and MMCplus. (128 MB ~ 8 GB)

2.7" Wide (16:9) LCD Display (112K Pixels)

You can see the bigger picture by enlarging the 4:3 aspect ratio into 16:9 wide screen with the 2.7" wide (16:9) LCD screen. The 112K pixel LCD monitor rotates up to 270 degrees for flexible viewing angles and provides sharp, detailed image for monitoring and playback.

Capture Visions Farther Than The Eye Can See (34x Optical/1200x Digital Zoom)

Samsung's powerful optical zoom lenses bring the world closer without sacrificing image quality. In addition, Digital Zoom interpolation means that extreme digital zooming is clearer, with less distortion than previous types of digital zooms.



Various Recording Features

The memory camcorder supports Anti-Shake(EIS) (Electronic Image Stabilizer), Digital Effect and a wide range of other functions that you can select according to the scene you are recording. ➡pages 48 ~ 56

Enjoying Various Playback Features

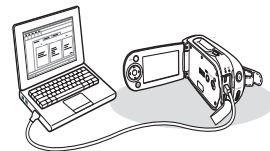
Unlike tape operation, playback is simple and easy in this memory camcorder since no time is needed for rewinding or fast forward operations. Various functions are available for enjoying many different types of playback.

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Play back on your PC

USB 2.0 enables the smooth transfer of movies to a computer. With the bundled software you can easily transfer and play back your own movies on your PC.

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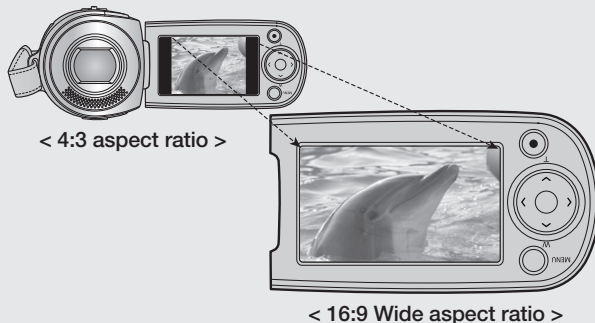


Webcam for multi-entertaining

Connect the memory camcorder to a PC via a USB 2.0 cable and instantly communicate via live video with business associates, friends and family wherever you are.





Versatile 16:9 Wide & 4:3 Display option

You can easily select the display option when recording or playback (16:9 Wide/4:3). Samsung's 16:9 Wide display option lets you monitor more widely on the 2.7" wide LCD screen when recording or playback with your memory camcorder. Ensure your entire movies are recorded in 4:3 aspect ratio regardless of the display option (16:9 Wide/4:3 aspect ratio).



safety warnings

What the icons and signs in this user manual mean :

 WARNING	Means that death or serious personal injury is a risk.
 CAUTION	Means that there is a potential risk for personal injury or material damage.
 CAUTION	To reduce the risk of fire, explosion, electric shock, or personal injury when using your memory camcorder, follow these basic safety precautions:
	Means hints or referential pages that may be helpful when operating the memory camcorder.

These warning signs are here to prevent injury to you and others.

Please follow them explicitly. After reading this section, keep it in a safe place for future reference.

important information on use

BEFORE USING THIS CAMCORDER

- **This memory camcorder is designed exclusively for high-capacity built-in flash memory and external memory card.**
- **This memory camcorder records video in MPEG4 format compliant with SD-VIDEO format.**
- **Please be noted that this memory camcorder is not compatible with other digital video formats.**
- **Before recording important video, make a trial recording.**
 - Play back your trial recording to make sure the video and audio have been recorded properly.
- **The recorded contents cannot be compensated for:**
 - Samsung cannot compensate for any damages caused when recording is not made normally or recorded contents cannot be played back because of a defect in the memory camcorder, card.
Also, Samsung cannot be responsible for your recorded video and audio.
 - Recorded contents may be lost due to a mistake when handling this memory camcorder or memory card, etc. Samsung shall not be responsible for the compensation for damages due to the loss of recorded contents.
- **Make a backup of important recorded data**
 - Protect your important recorded data by copying the files to a PC. It is recommended to copy it from your PC to other recording media for storage. Refer to the software installation and USB connection guide.
- **Copyright: Please be noted that this memory camcorder is intended for an individual consumer's use only.**
 - Data recorded on the card in this memory camcorder using other digital/analog media or devices is protected by the copyright act and cannot be used without permission of the owner of copyright, except for personal enjoyment. Even if you record an event such as a show, performance or exhibition for personal enjoyment, it is strongly recommended that you obtain the permission beforehand.

precautions on use

IMPORTANT NOTE

- **Handle the liquid crystal display (LCD) with care:**

- The LCD is a very delicate display device: Do not press its surface with excessive force, hit it or prick it with a sharp object.
- If you push the LCD surface, unevenness in display may occur. If unevenness does not disappear, turn the camcorder off, wait for a few moments, and then turn it on again.
- Do not place the camcorder with the open LCD screen down.
- Close the LCD monitor when not using the camcorder

- **Liquid crystal display:**

- The LCD screen is a product of high precision technology. Out of the total pixels (approx. 112,000 pixels of an LCD monitor), 0.01% or less pixels may be out (black dots) or may remain lit as coloured dots (red, blue, and green). This shows the limitations of the current technology, and does not indicate a fault that will interfere with recording.
- The LCD screen will be slightly dimmer than usual when the camcorder is at low temperature, as in cold areas, or right after the power is turned on. Normal brightness will be restored when the temperature inside the camcorder rises. Note that the foregoing phenomena have no effect on the image in a storage media, so there is no cause for concern.

- **Hold the memory camcorder correctly:**

- Do not hold the memory camcorder by the LCD monitor when lifting it: the LCD monitor could detach and the memory camcorder may fall.

- **Do not subject the memory camcorder to impact:**

- This memory camcorder is a precision machine. Take great care that you do not strike it against a hard object or let it fall.
- Do not use the memory camcorder on a tripod in a place where it is subject to severe vibrations or impact.

- **No sand or dust!**

- Fine sand or dust entering the memory camcorder or AC power adaptor could cause malfunctions or defects.

- **No water or oil!**

- Water or oil entering the memory camcorder or AC power adaptor could cause electric shock, malfunctions or defects.

- **Heat on surface of product:**

- The surface of the memory camcorder will be slightly warm when using, but this does not indicate a fault.

- **Be careful of unusual ambient temperature:**
 - Using the memory camcorder in a place where the temperature is over 140°F (40°C) or lower than 32°F (0°C) may result in abnormal recording/playback.
 - Do not leave the memory camcorder on a beach or in a closed vehicle where the temperature is very high for a long time: This could cause malfunctions.
- **Do not point directly at the sun:**
 - If direct sunlight strikes the lens, the memory camcorder could malfunction or a fire could occur.
 - Do not leave the memory camcorder with the LCD screen exposed to direct sunlight: This could cause malfunction.
- **Do not use the memory camcorder near TV or radio:**
 - This could cause noise to appear on the TV screen or in radio broadcasts.
- **Do not use the memory camcorder near strong radio waves or magnetism:**
 - If the memory camcorder is used near strong radio waves or magnetism, such as near a radio wave tower or electric appliances, noise could enter video and audio that are being recorded. During playback of normally recorded video and audio, noise may also be present in picture and sound. At worst the memory camcorder could malfunction.
- **Do not expose the memory camcorder to soot or steam:**
 - Thick soot or steam could damage the memory camcorder case or cause malfunctions.
- **Do not use the memory camcorder near corrosive gas:**
 - If the memory camcorder is used in a place where there is dense exhaust gas generated by gasoline or diesel engines, or corrosive gas such as hydrogen sulfide, the external or internal terminals could corrode, disabling normal operation, or the battery connection terminals could corrode, so that power will not turn on.
- **Do not use the memory camcorder near ultrasonic humidifier:**
 - Calcium and other chemicals dissolved in water could scatter in the air, and white particles could adhere to the optical head of the memory camcorder, which could cause it to operate abnormally.
- **Do not clean the memory camcorder body with benzene or thinner:**
 - The coating of exterior could peel off or the case surface could deteriorate.
 - When using a chemical cleaning cloth, follow the instructions.
- **Keep the memory card out of reach of children to prevent swallowing.**
- **To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.**

precautions on use

ABOUT THIS USER MANUAL

- **This User Manual covers the complete range of VP-MX10,VP-MX10P,VP-MX10H,VP-MX10A,VP-MX10AU and VP-MX10AH.**

Please note that models with an 'A' letter has built-in flash memory. VP-MX10, VP-MX10P,VP-MX10H does not support built-in flash memory, VP-MX10A , VP-MX10AU and VP-MX10AH support built-in flash memory(4GB). Although some features of VP-MX10, VP-MX10P,VP-MX10H, VP-MX10A, VP-MX10AU and VP-MX10AH are different, they are both operated in the same way.

- Illustrations of VP-MX10A model are used in this user manual.
- The displays in this user manual may not be exactly the same as those you see on the LCD screen.
- Designs and specifications of storage media and other accessories are subject to change without any notice.

NOTES REGARDING A TRADEMARK

- All the trade names and registered trademarks mentioned in this manual or other documentation provided with your Samsung product are trademarks or registered trademarks of their respective holders.
- Windows® is registered trademark or trademark of Microsoft Corporation, registered in the United States and other countries.
- Macintosh is trademark of Apple Computer, Inc.
- All the other product names mentioned here in may be the trademark or registered trademarks of their respective companies.
- Furthermore, "TM" and "R" are not mentioned in each case in this manual.



Correct Disposal of This Product (Waste Electrical & Electronic Equipment)

(Applicable in the European Union and other European countries with separate collection systems)

This marking shown on the product or its literature, indicates that it should not be disposed with other household wastes at the end of its working life. To prevent possible harm to the environment or human health from uncontrolled waste disposal, please separate this from other types of wastes and recycle it responsibly to promote the sustainable reuse of material resources. Household users should contact either the retailer where they purchased this product, or their local government office, for details of where and how they can take this item for environmentally safe recycling. Business users should contact their supplier and check the terms and conditions of the purchase contract. This product should not be mixed with other commercial wastes for disposal.

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
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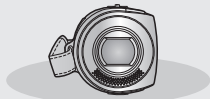
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quick start guide



- This chapter introduces you to the basic features of your memory camcorder.
- See the reference pages for more information.

Step1

Preparation

- Connecting a power source ➡page 12
- Check out the storage media ➡page 32
- Setting the Date/Time and OSD Language ➡page 30

Step2

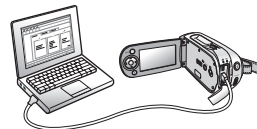
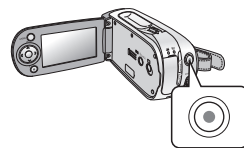
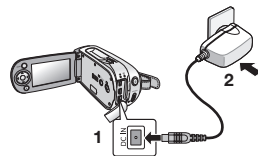
Recording

- Recording the movie ➡page 38

Step3

Playing back

- Selecting an image to play back from the thumbnail index views ➡page 42
- Viewing on the your PC or TV connected to your memory camcorder
➡page 73, 77



getting to know your memory camcorder

WHAT'S INCLUDED WITH YOUR MEMORY CAMCORDER

Your new memory camcorder comes with the following accessories. If any of these items is missing from your box, call Samsung's Customer Care Centre.

★ **The exact shape of each item may vary by model.**



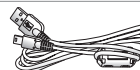
Battery pack
(IA-BP85ST)



AC power adapter
(AA-E9 type)



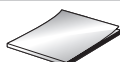
Multi-AV cable



USB cable



Software CD



User manual



Button type battery
(type: CR2025)



Lens cover



Lens cover strap



Pouch



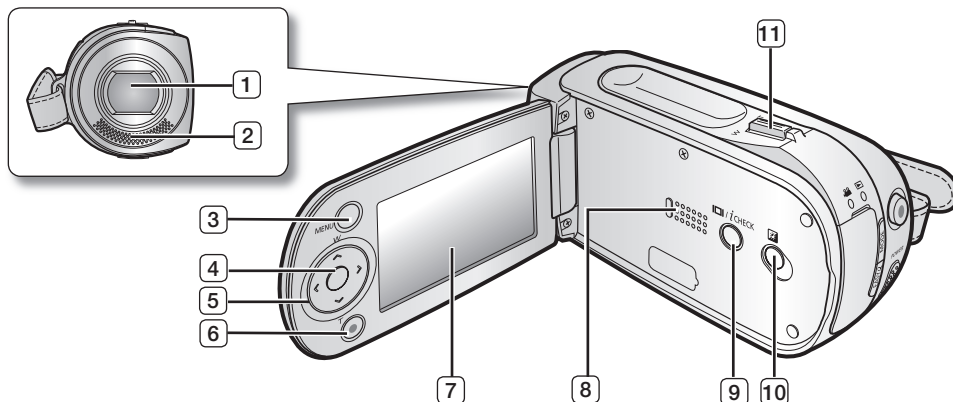
Cradle*



- The contents can vary depending on the sales region.
- Parts and accessories are available at your local Samsung dealer and service centre.
- The memory card is not included. See page 34 for compatible memory cards for your memory camcorder.
- *: Not supplied with your camcorder. To buy the optional accessory, contact your nearest Samsung dealer or Samsung service centre.

getting to know your memory camcorder

FRONT & LEFT VIEW



1 Lens

2 Internal microphone

3 MENU button

4 OK button

5 Control button (⏮/⏭/⏪/⏩/W/T)

6 Recording start/stop button

7 LCD screen

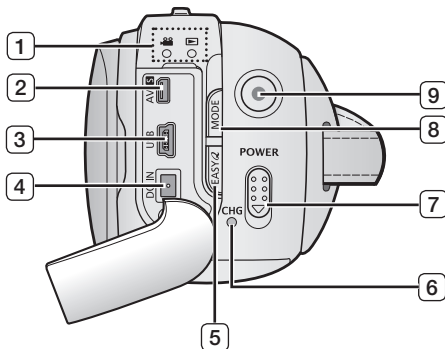
8 Built-in speaker

9 iCHECK button

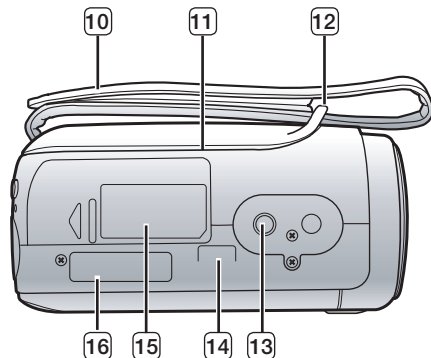
10 LCD ENHANCER (⏮/⏭) button

11 Zoom lever (W/T)

SIDE & BOTTOM VIEW



- ① MODE indicator (record (📹) / player (▶))
- ② Multi cable jack (AV/📺)
- ③ USB jack (USB)
- ④ DC IN jack (DC IN)
- ⑤ EASY.Q button
- ⑥ Charging indicator (CHG)
- ⑦ POWER switch
- ⑧ MODE button



- ⑨ Recording start/stop button
- ⑩ Grip belt
- ⑪ Swivel Hand-grip
- ⑫ Grip belt hook
- ⑬ Tripod receptacle
- ⑭ Cradle receptacle
- ⑮ Memory card / Battery slot cover
- ⑯ Button type battery slot

preparation

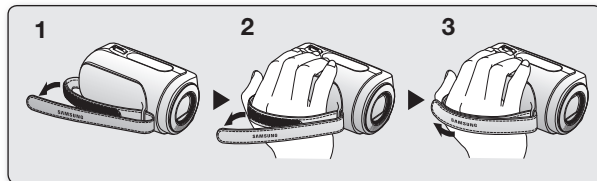
This section provides information that you should know before using this memory camcorder such as how to use the provided accessories, how to charge the battery, how to setup the operation mode and initial setup.

USING THE ACCESSORIES

Attaching a Grip Belt

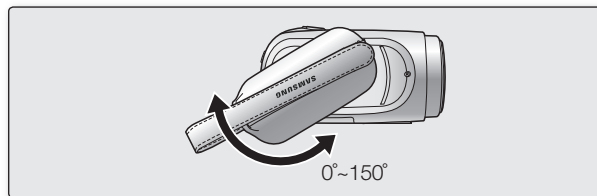
- Insert your right hand from the bottom of memory camcorder up to the base of your thumb.
- Put your hand in a position where you can easily operate the **Recording start/stop** button and the **Zoom** lever.
- Adjust the length of grip belt so that the memory camcorder is stable when you press the **Recording start/stop** button with your thumb.

1. Detach the belt.
2. Adjust the length of grip belt.
3. Attach the belt.



Angle Adjustment

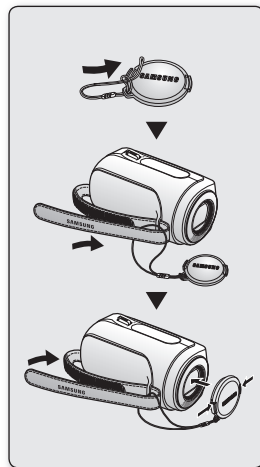
- Rotate the swivel hand-grip at the most convenient angle.
- You can rotate it downward upto 150 degrees.



Attaching a Lens Cap

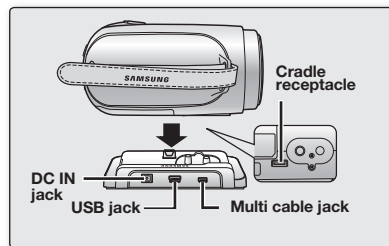
Pass the provided string through the hole in the grip belt attachment part and pass it through the hole in the lens cap.

1. Attach the lens cap string to lens cap.
Shorter side is for the lens cap.
2. Attach the string to the attachment hole of memory camcorder.
Detaching the grip belt makes things easier.
3. Push both sides of cap inward and attach it over the lens.



Using the cradle (optional accessory)

Cradle is a connection plate, which can be used to make it easy charging the battery, or connecting to a TV or a PC. Use the memory camcorder with the cradle more stably when charging the battery, or connecting to a TV or a PC.



preparation

CONNECTING A POWER SOURCE

- There are two types of power source that can be connected to your memory camcorder.
- Do not use provided power supply units with other equipment.
 - The battery pack: used for outdoor recording.
 - The AC power adapter : used for indoor recording. ➡page 19

To Charge the Battery Pack

- Be sure to charge the battery pack before you start using your memory camcorder.

Battery Pack installation / ejection

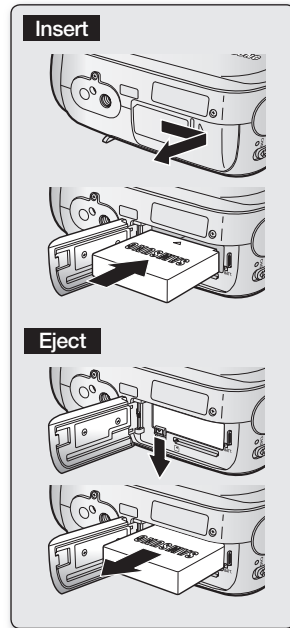
It is recommended you purchase one or more additional battery packs to allow continuous use of your memory camcorder.

Inserting the battery pack

1. Slide and open the battery slot cover as shown in the diagram.
2. Insert the battery pack into the battery slot until it softly clicks.
 - Make sure that the SAMSUNG logo is facing up while the set is placed as shown in the diagram.
3. Slide and close the battery slot cover

Ejecting the battery pack

1. Slide and open the battery slot cover and push the battery lock.
 - Gently push the battery lock in the direction as shown in the diagram to eject the battery out.
2. Pull the ejected battery out in the direction as shown in the diagram.
3. Slide and close the battery slot cover.



About battery packs

- The benefits of battery pack: Battery pack is small but has a large power capacity. It should be recharged in any environment that is between 32°F (0°C) and 104°F (40°C).
However, when it is exposed to cold temperatures (below 32°F (0°C)), its usage time becomes reduced and it may cease to function. If this happens, place the battery pack in your pocket or other warm, protected place for a short time, then reattach it to the memory camcorder.
- The recording time shortens dramatically in a cold environment. The continuous recording times in the operating instructions are measured using a fully charged battery pack at 77 °F (25 °C). As the environmental temperature and conditions vary, the remaining battery time may differ from the approximate continuous recording times given in the instructions.

On handling a battery pack

- To preserve battery power, keep your memory camcorder turned off when you are not operating it.
- For power saving purposes, the memory camcorder will automatically turn off in 5 minutes in standby mode. (Only if you set **"Auto Power Off"** from the menu with 5 min.)
- Do not touch, or metallic objects to come into contact with the terminals.
- Make sure that the battery pack fits firmly into place. Do not drop the battery pack.
Dropping the battery pack may damage itself.
- Be careful to keep the battery pack out of the reach of children. There is danger that a child might swallow it.
- Frequent use of the LCD screen or using the fast forward or rewind buttons wears out the battery pack faster.

preparation

Maintaining the battery pack

- The recording time is affected by temperature and environmental conditions.
- The recording time shortens dramatically in a cold environment. The continuous recording times in the operating instructions are measured using a fully charged battery pack at 77 °F (25 °C).
As the environmental temperature and conditions vary, the remaining battery time may differ from the approximate continuous recording times given in the instructions.
- We recommend only using the original battery pack that is available from your Samsung retailer. When the battery reaches the end of its life, please contact your local dealer. The batteries have to be dealt with as chemical waste.
- Clean the terminals to remove any foreign substances before inserting the battery.
- Do not put the battery pack near any heat source (i.e. fire or a heater).
- Do not disassemble, apply pressure to, or heat the battery pack.
- Do not allow the + and - terminals of the battery pack to be short-circuited.
It may cause leakage, heat generation, induce overheating or fire.
 - Do not expose the battery pack to water. The battery pack is not water resistant.
- When fully discharged, a battery pack damages the internal cells.
The battery pack may be prone to leakage when fully discharged.
- Remove from charger or powered unit when not in use. Even when the power is switched off, the battery pack will still discharge if it is left attached to the memory camcorder.
- When not using the memory camcorder for an extended period:
It is recommended that you fully charge the battery pack once a year, attach it to memory camcorder and use it up : then remove the battery pack and store it in a cool place again.

About the battery life

- Battery capacity decreases over time and through repeated use. If decreased usage time between charges becomes significant, it is probably time to replace it with a new one.
- Each battery's life is governed by storage, operating and environmental conditions.

Use only approved battery packs.

Otherwise, there is a danger of overheating, fire or explosion.

Samsung is not responsible for problems occurring due to using unapproved batteries.

Charging, recording and playback times with fully charged battery pack (with no zoom operation, etc.)

- For your reference, the approximate time with fully charged battery pack:

Battery type		IA-BP85ST		
Charging time		approx. 2 hr.		
Media	Mode	Super Fine	Fine	Normal
Built-in memory	Continuous recording time	approx. 115min.	approx. 120min.	approx. 125min.
	Playback time	approx. 230min.	approx. 230min.	approx. 230min.
SDHC/ MMCplus	Continuous recording time	approx. 120min.	approx. 125min.	approx. 130min.
	Playback time	approx. 230min.	approx. 230min.	approx. 230min.

- The time is only for reference. Figures show above are measured under Samsung's test environment, and may differ from users and conditions.

Continuous Recording (without zoom)

The continuous recording time of memory camcorder in the table shows the available recording time when the memory camcorder is in the recording mode without using any other function after recording started. In actual recording, the battery pack may discharge 2-3 times faster than this reference since the record start/stop and zoom are being operated, and playback is performed. Assume that the recordable time with a fully charged battery pack is between 1/2 and 1/3 of the time in the table, and prepare type and number of battery packs to allow for the time you are planning to record on the memory camcorder. Note that the battery pack discharges faster in cold environment.

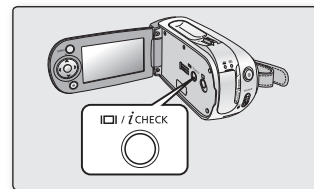


The charging time will vary depending on the remaining battery level.

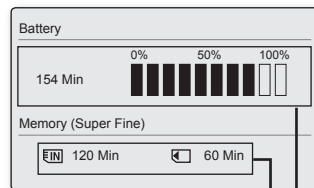
preparation

To check the remaining battery charge

- When the camcorder is turned off (battery is installed) press and release the **□ / iCHECK** button to display the remaining capacity of the battery capacity.
- When the camcorder is turned on (battery is installed) press and hold the **□ / iCHECK** button for more than 2-3 seconds to display the remaining battery capacity. Press the **□ / iCHECK** button again or any other button to return to the initial OSD while the battery information is displayed.



- When the battery is installed and the AC adapter is connected, if you press **□ / iCHECK** button, the remaining battery capacity is displayed.
- When the AC adapter alone is connected, pressing the **□ / iCHECK** button will display **"No Battery"** message.









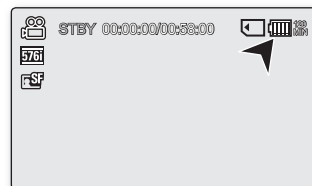
Recording capacity (approx.)

Remaining battery(approx.)

Battery Level Display

The Battery Level Display shows the amount of battery power remaining in the battery pack.

Battery Level Indicator	State	Message
	Fully charged	-
	20~40% used	-
	40~60% used	-
	60~80% used	-
	80~95% used	-
	Exhausted(flickers): The device will soon turn off. Change the Battery Pack as soon as possible.	-
	(flickers): The device will be forced to turn off after 5 seconds.	"Low battery"



preparation

Charging the Battery Pack

The IA-BP85ST battery pack provided with this memory camcorder may be charged a little at purchase time: Charge it before using the memory camcorder.

- Use IA-BP85ST battery pack only.
- The battery pack may be charged a little at the time of purchase.

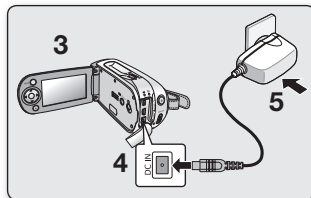
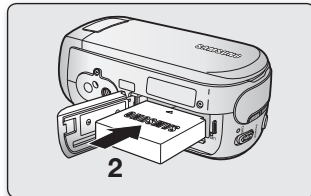
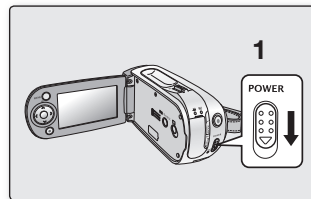
1. Slide the **POWER** switch downward to turn off the power.
2. Insert the battery pack.
3. Open the LCD screen and jack cover.
4. Connect the AC power adapter to the DC IN jack of your memory camcorder.
5. Connect the AC power adapter to a wall socket.
 - The charging indicator will start to blink, showing that the battery pack is charging.
6. When the battery pack is fully charged, disconnect the AC power adapter from the memory camcorder.



Even if your camcorder is turned off, AC power (house current) is still supplied to it while connected to the wall outlet via the AC power adaptor.



- Do not use the AC adaptor placed in an enclosed space, such as between a wall and furniture.
- Before detaching the power source, make sure that the camcorder's power is turned off. Failure to do so can result in camcorder malfunction.
- Use the nearby wall outlet when using the AC power adaptor. Disconnect the AC power adaptor from the wall outlet immediately if any malfunction occurs while using your camcorder.

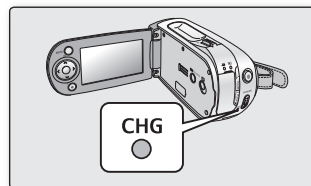


Charging indicator

Tips for battery identification

- The colour of the LED indicates charging status.
 - If the battery has been fully charged, the charge indicator is green.
 - If you are charging the battery, the colour of the charge indicator is orange.The charge indicator flickers if the battery is abnormal.

Colour	Charging state
Orange	On Charging
Green	Fully Charged



Using a household power source

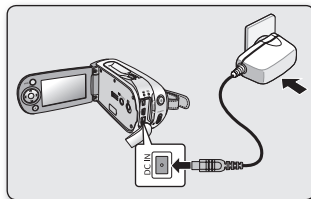
Make the same connections as you do when charging the battery pack.
The battery pack will not lose its charge in this case.

Using memory camcorder with AC power adaptor

It is recommended that you use the AC power adaptor to power the memory camcorder from a household AC outlet when you perform settings on it, play back, or use it indoors.

- Make the same connections as you do when charging the battery pack.

➡ page 18



- Be sure to use the specified AC power adaptor to power the memory camcorder. Using other AC power adaptors could cause electric shock or result in fire.
- The AC power adaptor can be used around the world. An AC plug adaptor is required in some foreign countries. If you need one, purchase it from your distributor.

preparation

BUTTON TYPE BATTERY INSTALLATION

1. Insert the button type battery in the battery slot on the bottom of the memory camcorder.
2. Position the button type battery with the positive (\oplus) terminal face down in the button type battery slot.

Precautions regarding the button type battery

- There is a danger of explosion if button type battery is incorrectly replaced. Replace only with the same or equivalent type.

Battery installation for the internal clock

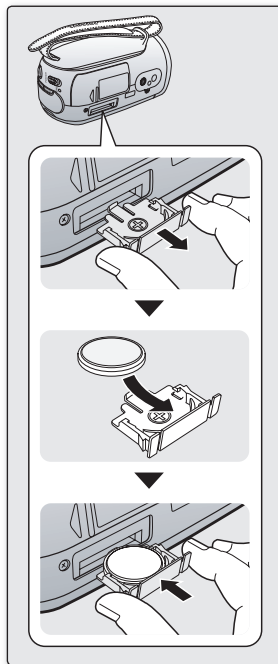
The button type battery maintains the clock function and preset contents of the memory : even if the battery pack or AC power adapter is removed.

The button type battery for the memory camcorder lasts about 6 months under normal operation from the time of installation.

When the button type battery becomes weak or dead, the date/time indicator will display **"2007/01/01 12:00AM "** when you turn the date and time display on.



**Keep the button type battery out of reach of children.
Should a battery be swallowed, consult a doctor immediately.**



BASIC OPERATION OF YOUR MEMORY CAMCORDER

This section explains the basic techniques of recording movies, and also basic settings on your memory camcorder. Set the appropriate operation mode according to your preference using **POWER** switch and **MODE** button.

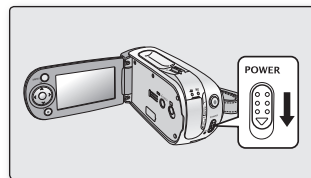
Turning memory camcorder on or off

You can turn the power on or off by sliding the **POWER** switch down.

- Slide the **POWER** switch repeatedly to toggle the power on or off.

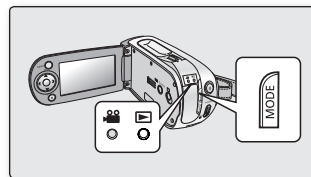


- Power saving function
 - In the setting at the time of purchase, the power turns off automatically if you leave your camcorder without any operation attempted off for approximately 5 minutes, to save the battery power. ➡page 65
 - If warning messages appear on the screen, follow the instructions. ➡page 81



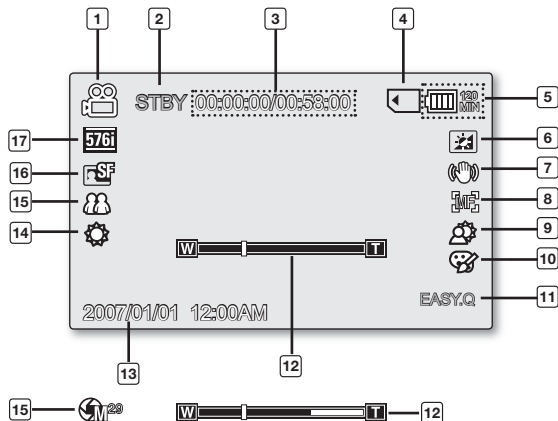
Setting the operating modes

- You can switch the operating mode in the following order each time you press the **MODE** button.
- Movie Record mode (📹) → Movie Play mode (▶) → Movie Record mode (📹)
- Each time the operational mode changes, the respective mode indicator lights up.
 - Movie Record mode (📹): To record movie images.
 - Movie Play mode (▶): To play movie image.



preparation

LCD SCREEN INDICATORS

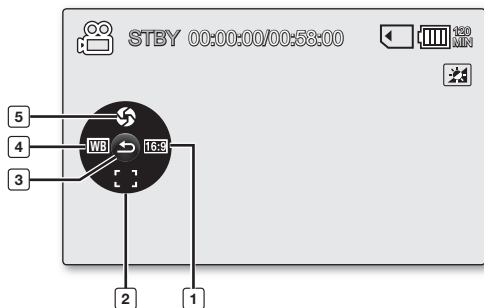


- The above screen is an example for explanation: It is different from the actual display.
- The OSD indicators are based on memory capacity of 2GB(MMC plus).
- Functions marked with * won't be kept when the memory camcorder restarts.
- For enhanced performance, the display indications and the order are subject to change without prior notice.

Movie Record mode

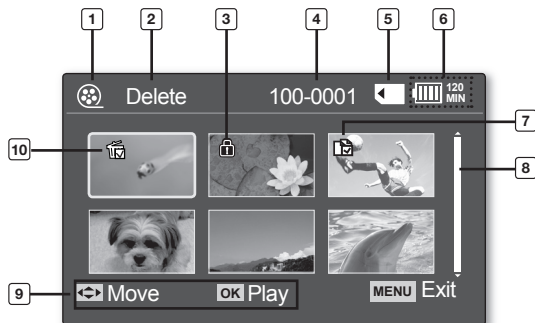
1	Movie Record mode
2	Operating status ([STBY](standby) or [●] (recording))
3	Time counter (movie recording time: remaining recordable time)
4	Storage media (Built-in memory(VP-MX10A/MX10AU/MX10AH only) or memory card)
5	Battery info.(Remaining battery level/time)
6	LCD Enhancer *
7	Anti-Shake(EIS) (Electronic Image Stabilizer)
8	Focus *
9	Back Light *
10	Digital Effect
11	EASY.Q *
12	Zoom (Optical zoom / Digital zoom)
13	Date/Time
14	White balance
15	Scene Mode (AE) / Exposure (Manual) *
16	Video quality
17	Resolution

LCD SCREEN INDICATORS



Movie Record mode: Shortcut menu (OK Guide)

- | | |
|---|--|
| 1 | Screen size (16:9 Wide/4:3) |
| 2 | Focus (Auto Focus/Manual Focus) * |
| 3 | Shortcut menu (OK Guide) / Return |
| 4 | White balance * |
| 5 | Exposure (Auto Exposure/Manual Exposure) |

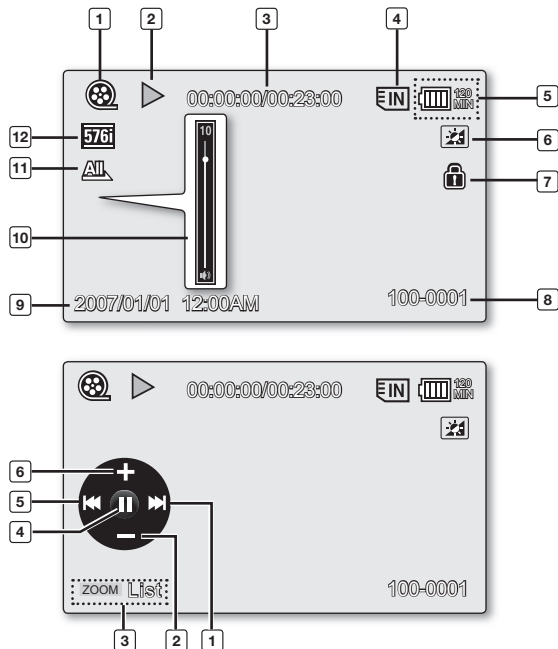


Movie Play mode

- | | |
|----|--|
| 1 | Movie Play mode |
| 2 | Menu name (Delete, Protect, Copy) |
| 3 | Protect |
| 4 | File Name |
| 5 | Storage media
(Built-in memory (VP-MX10A/MX10AU/MX10AH only)
or memory card) |
| 6 | Battery info. (Remaining battery level/time) |
| 7 | Copy Selected (VP-MX10A/MX10AU/MX10AH only) |
| 8 | Scroll bar |
| 9 | Button Guide |
| 10 | Delete Selected |

preparation

LCD SCREEN INDICATORS



Movie Play mode

- | | |
|----|--|
| 1 | Movie Play mode |
| 2 | Play Status |
| 3 | Time code (Elapsed time / Recorded time) |
| 4 | Storage media
(Built-in memory (VP-MX10A/MX10AU/MX10AH only)
or memory card) |
| 5 | Battery info.(Remaining battery level/time) |
| 6 | LCD Enhancer * |
| 7 | Protect |
| 8 | File Name |
| 9 | Date/Time |
| 10 | Volume |
| 11 | Play Option |
| 12 | Resolution |


Movie Play mode: Shortcut menu (OK Guide)

- | | |
|---|-------------------|
| 1 | FF (fast forward) |
| 2 | Volume Down |
| 3 | Button Guide |
| 4 | Play/Pause |
| 5 | REW(rewind) |
| 6 | Volume Up |

TURNING THE SCREEN INDICATORS ON/OFF (/ *i*CHECK)

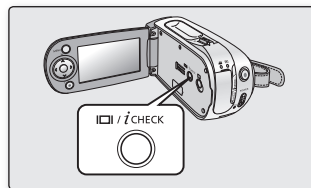
Switching the information display mode

- You can switch the display mode of on-screen information:



Press the  / *i*CHECK button.

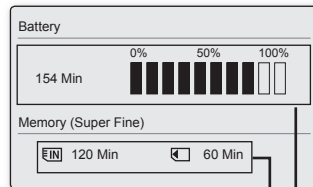
The full and minimum display modes will alternate.

- Full display mode:** All types of information will appear.
- Minimum display mode:** The only operating status indicator will appear.



Checking the remained battery and memory capacity

- When the camcorder is turned off (battery is installed) press and release the  / *i*CHECK button to display the remaining capacity of the battery capacity.
- When the camcorder is turned on (battery is installed) press and hold the  / *i*CHECK button for more than 2-3 seconds to display the remaining battery capacity.
- After a while, the approximate recordable time in the selected storage and battery information appear for about 10 seconds.





Recording capacity (approx.)

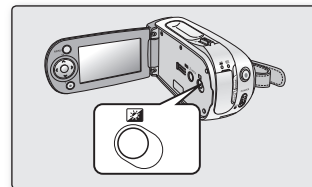
Remaining battery(approx.)

preparation

USING THE LCD ENHANCER

- Contrast is enhanced for a clear and bright image.
This effect is also implemented outdoors in bright daylight.
- 1. Press the **LCD ENHANCER** () button.
The selected function icon is displayed.
- 2. To exit LCD ENHANCER, press the **LCD ENHANCER** () button again.

 LCD ENHANCER function does not affect the quality of the image being recorded.



LCD POWER SAVING FUNCTION

- The LCD screen is turned off after a certain period of time has passed (see below) in each mode in order to prevent unnecessary battery power consumption.
- Press any button to go back and turn on the LCD screen.

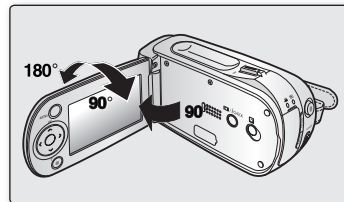
Mode	Movie					Settings	USB	
Sub-mode	STBY Mode	While Recording	Play (single view)	Play (thumbnail view)	Demo Mode	-	Webcam	Mass Storage
Time	10 min	None	None	10 min	None	60 sec	60 sec	60 sec

ADJUSTING THE LCD SCREEN

1. Open up the LCD screen 90 degrees with your finger.
2. Rotate it to the best angle to record or play.
 - If you rotate the LCD screen 180 degrees to the lens side, you can close the LCD screen with it facing out. This is convenient during playback.



- See page 65 to adjust brightness and colour of the LCD screen.
- Over-rotation may cause damage to the inside of the hinge that connects the LCD screen to the memory camcorder.



WARNING

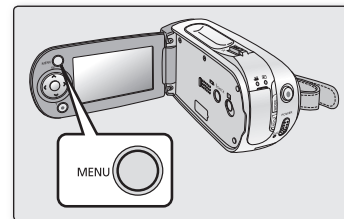
Do not lift the memory camcorder when holding the LCD screen.

USING THE MENU BUTTON

1. Set the desired mode by pressing the **MODE** button.
2. Press the **MENU** button.
3. Move the cursor by pressing the **Control** button ($\wedge/\vee/\angle/\triangleright$) to select desired menu item, and then press **Control** button **OK** to confirm.
4. Press the **MENU** button to finish.




MENU button dose not operate in the EASY.Q mode.

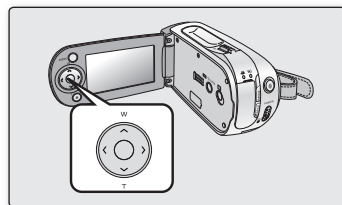


preparation

USING THE CONTROL BUTTONS

Used for playback, pausing, fast forwarding, and rewinding. Also used as directional buttons (up, down, left, right) and to make a selection when selecting movie images or menus.

1. Press the **Control** button (◀/▶) to move left / right.
 2. Press the **Control** button (▲/▼) to move up / down.
 - Confirm your selection by pressing the **OK** button.
-  • **Control** button (**OK** / (◀/▶)) does not operate in the EASY. Q mode.
- Using the **OK** button, you may directly access the shortcut menu.
- ➡page 29



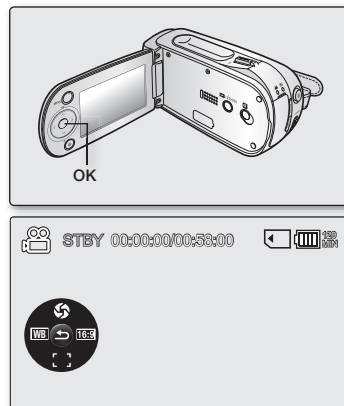
Using the Control button

Button	Movie Record(📹) mode	Movie Play(▶) mode	Menu selection
OK	Access the Shortcut menu	Playback /Pause	Confirms selection
▲	Zoom (wide)	Increases the volume	Moves the cursor up
▼	Zoom (tele)	Decreases the volume	Moves the cursor down
◀	-	- Search playback RPS (Reverse Playback Search) rate: x2→x4→x8→x16→x32→x64 - Skip Playback	Moves to the previous menu
▶	-	- Search playback FPS (Forward Playback Search) rate: x2→x4→x8→x16→x32→x64 - Skip Playback - Frame-by-frame playback	Moves to the next menu

SHORTCUT MENU (OK GUIDE)

Shortcut menu (OK guide) represents the most frequently accessed functions according to the selected mode.

1. Press the **OK** button.
 - Shortcut menu (OK guide) is displayed.
2. Press the **Control** button (▲/▼/◀/▶) to control the setting.
3. Press the **OK** button to confirm your selection.
 - Press the **OK** button to exit the shortcut menu.



Shortcut function using the Control buttons

Button	Movie Record()mode	Movie Play() mode
OK	- Access the shortcut menu - Confirm selection - Exit the shortcut menu	- Shortcut menu (OK guide) is displayed - Playback /Pause
▲	Exposure (Auto / Manual)	Increases the volume
▼	Focus (Auto / Manual)	Decreases the volume
◀	White Balance (Auto ~ Custom WB)	- Search playback RPS (Reverse Playback Search) rate: x2→x4→x8→x16→x32→x64 - Skip Playback
▶	16 : 9 Wide (Off / On)	- Search playback FPS (Forward Playback Search) rate: x2→x4→x8→x16→x32→x64 - Skip Playback Frame-by-frame playback



OK button dose not operate in the EASY.Q mode.

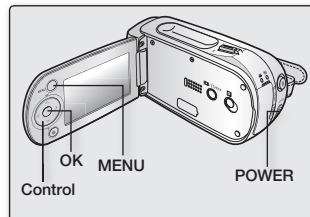
preparation

INITIAL SETTING : OSD LANGUAGE & DATE AND TIME

- Initial setting is available in all operating modes.
- To read the menus or messages in your desired language, set the OSD language.
To store the date and time during recording, set the date/time.

How to set the settings mode

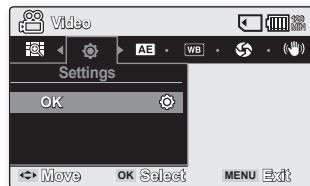
1. Slide the **POWER** switch downward to turn on the memory camcorder.
2. Press the **MENU** button.
3. Press the **Control** button (< / >) to select "**Settings**".
4. Press the **OK** button.
 - The settings menu screen appears.



Selecting the OSD language

You can select the desired language to display the menu screen and the messages.

1. Set the "**Settings**" mode.
 - The settings menu screen appears.
 - Refer to "How to set the settings mode" for accessing to "**Settings**" mode.
2. Press the **Control** button (< / >) to select "**Language**".
3. Press the **Control** button (^ / v) to select the desired OSD language, and then press the **OK** button.
 - English / 한국어 / Français / Deutsch / Italiano / Español / Português / Nederlands / Svenska / Suomi / Norsk / Dansk / Polski / Magyar / Українська / Русский / 中文 / ไทย / Türkçe / Iranian / Arabic
4. Press the **MENU** button to exit the menu.
 - The OSD language is refreshed in the selected language.
 - Even if the battery pack or AC power are removed, the language setting will be preserved.
 - "**Language**" options may be changed without prior notice.



Setting Date and Time

Set the current date and time so that the date and time at which you make a recording can be recorded correctly.

The following procedure can also be used to correct the date and time you have already set.

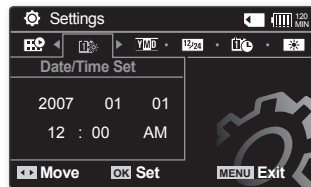
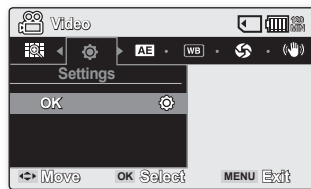
1. Set the **"Settings"** mode.
 - The settings menu screen appears.
 - Refer to "How to set the settings mode" for accessing to **"Settings"** mode.
➡page 30.
2. Press the **Control** button (< / >) to select **"Date/Time Set"** and then press the **OK** button.
3. Set the desired value by moving the **Control** button (^ / v).
4. Move to the next item by moving the **Control** button (< / >), and then set values by moving the **Control** button (^ / v).
 - Items are displayed in the order of the date format.
 - By default, it appears in the order of year, month, date, hour, minute and AM/PM.
5. After setting the last item, press the **OK** button to finish the setting.
 - Press the **MENU** button to exit the menu.



- You can set the year up to 2037.
- After setting, the date and time are automatically recorded on a special data area of the storage media.
- The button type battery maintains the clock function and preset contents of the memory : even if the battery pack or AC power adapter is removed. The button type battery for the memory camcorder lasts about 6 months under normal operation from the time of installation. When the button type battery becomes weak or dead, the date/time indicator will display **"2007/01/01 12:00AM "** when you turn the date and time display on. ➡page 20.

Turning the date and time display on/off

- To switch the date and time display on or off, access the menu and change the date/time mode.
➡page 64



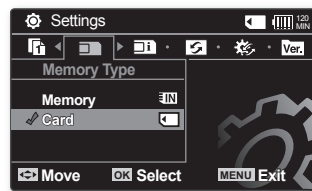
about the storage media

SELECTING THE STORAGE MEDIA (VP-MX10A/MX10AU/MX10AH ONLY)

You can record on the built-in memory or a memory card, so you should select the desired storage media before starting recording or playback.

Selecting the storage media (VP-MX10A/MX10AU/MX10AH only)

- Selecting the recording medium is available in the Movie record / Movie Play modes.
Movie images can be stored and played back using the built-in memory or a memory card.
Hence, set the memory type before recording and playing back images.
1. Press the **MENU** button.
 - The menu list will appear.
 2. Press the **Control** button (◀ / ▶) to select "**Settings**", then press the **OK** button.
 3. Press the **Control** button (◀ / ▶) to select "**Memory Type**", then press the **OK** button.
 4. Press the **Control** button (▲ / ▼) to select "**Memory**" or "**Card**" then press the **OK** button.
 5. Press the **MENU** button to exit.



Using the built-in memory (VP-MX10A/MX10AU/MX10AH only)

- Because this memory camcorder has an embedded 4GB memory, you don't need to buy any extra storage media. So you can take or playback moving/recording conveniently.

Using a memory card (not supplied)

- This memory camcorder has multi card slot for access to SDHC (Secure Digital High Capacity) and MMCplus.
- You can use SDHC and MMC plus card on your memory camcorder.
 - Some cards are not compatible depending on the memory card manufacturer and memory card type.



- If you insert a memory card when the memory camcorder is on, the pop-up message will prompt you automatically to select the storage type.
- If there is no memory card inserted, only the built-in memory will be available.

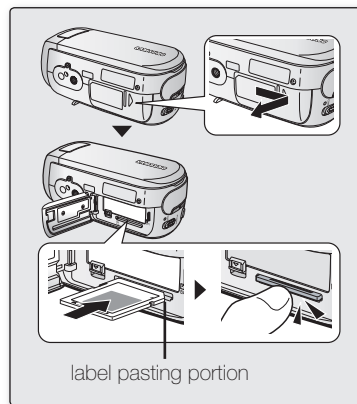
INSERTING / EJECTING THE MEMORY CARD

Inserting a memory card

1. Turn the memory camcorder off.
2. Slide the memory card slot cover to the right to open the cover.
3. Insert the memory card into the memory card slot until it softly clicks in the direction of the arrow shown in the diagram.
4. Close the cover.

Ejecting a memory card

1. Turn the memory camcorder off.
2. Slide the memory card slot cover to the right to open the cover.
3. Slightly push the memory card inwards to pop it out.
4. Pull the memory card out of the memory card slot and close the cover.



about the storage media

SELECTING A SUITABLE MEMORY CARD

A memory card is a compact portable storage media with a data capacity that exceeds the capacity of a floppy disk.

- **You can use a SDHC memory card and MMC plus.**
(If needed, buy a memory card separately.)
 - You can also use a SD memory card, but recommended that you use a SDHC memory card and MMC plus with your memory camcorder.
(SD memory cards over 4GB are not compatible with this memory camcorder.)
- **On this memory camcorder, you can use memory cards of the following capacity: 128MB ~ 8GB**
- **Compatible recording media**
 - The following recording media have been guaranteed to work with this memory camcorder. Others are not guaranteed to work, so buy such products with caution.
SDHC or SD memory cards: Panasonic, SanDisk, and TOSHIBA,
MMC plus: Transcend
- If other media are used, they may fail to record data correctly, or they may lose data that has already been recorded.
- For movie recording, use a memory card that support faster write speed(at least 1.25 MB/sec).

SDHC (Secure Digital High Capacity) Memory Card

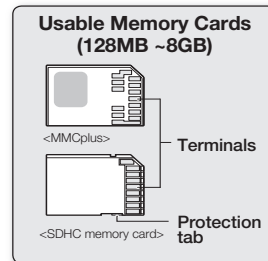
- SDHC memory card complies with new SD specification Ver.**2.00**. This latest specification was established by SD Card Association to realize data capacity over **2GB**.
- The SDHC memory card supports a mechanical write protection switch. Setting the switch prevents accidental erasure of files recorded on the SDHC memory card. To enable writing, move the switch up to the direction of terminals. To set write protection, move the switch down.
- Due to change in File Allocation System and physical specifications, SDHC memory card can not be used with current SD enabled host devices. SDHC memory card can be used with only SDHC enabled host devices which carry SDHC logo on devices its self or on its operation manual.

MMCplus (Multi Media Card plus)

- In the case of MMCplus, they have no protection tab so please use the protect function in the menu.

Common cautions for memory card

- Damaged data may not be recovered. It is recommended you make a back-up of important data separately on the hard disk of your PC.
- Turning the power off or removing a memory card during operation such as formatting, deleting, recording, and playback may cause the data loss.
- After you modify the name of a file or folder stored in the memory card using your PC, your camcorder may not recognize the modified file.



Handling a memory card

It is recommended that you power off before inserting or removing the memory card to avoid data loss.

It is not guaranteed that you can use a memory card formatted by other devices.

Be sure to format your memory card using this camcorder.

- You have to format newly-purchased memory cards, memory cards with data that your camcorder cannot recognize or are saved by other devices. Note that formatting erases all data on the memory card.
- If you cannot use a memory card that has been used with another device, format it with your memory camcorder. Note that formatting erases all information on the memory card.
- A memory card has a certain life span. If you cannot record new data, you have to purchase a new memory card.
- A memory card is a precision electronic media. Do not bend it, drop it, or cause a strong impact.
- Do not use or store in a place that has high temperature and humidity or dusty environment.
- Do not place foreign substances on the memory card terminals. Use a soft dry cloth to clean the terminals if required.
- Do not paste anything other than exclusive label on label pasting portion.
- Be careful to keep memory card out of the reach of children, who might swallow it.



The memory camcorder supports SDHC and MMCplus memory cards for data storage.

- The data storage speed may differ, according to the manufacturer and production system.
 - SLC(single level cell) system: faster write speed enabled.
 - MLC(multi level cell) system: only lower write speed supported.
- The user using a lower write speed memory card for recording a movie may have difficulties storing the movie on the memory card. You can even lose your movie data during the recording.
- In an attempt to preserve any bit of the recorded movie, the memory camcorder forcibly stores the movie on the memory card and displays a warning: **"Low speed card. Please record at lower quality."**

To facilitate movie recording, you are recommended to use a memory card that supports faster write speed.

- If you are unavoidably using a low speed memory card, it is desirable to lower the recording quality by one level **"Fine"** → **"Normal"** or decrease the movie size to 352P to reduce the data size.
- You can have three quality options to record a movie with the memory camcorder : **"Super Fine", "Fine", "Normal"**
- You can record the same scene in three quality levels of **"Super Fine", "Fine", "Normal"**. However, the better the quality is, the bigger the data size is.
- **For optimal performance of the memory camcorder, ensure that you purchase a fast speed memory card.**

about the storage media

RECORDABLE TIME AND CAPACITY

Recordable time for movie images

Media	Capacity	Super Fine		Fine		Normal	
		352x288p (288p)	720x576i(576i)/ 720x576p(576p)	352x288p (288p)	720x576i(576i)/ 720x576p(576p)	352x288p (288p)	720x576i(576i)/ 720x576p(576p)
built-in memory	4GB	approx. 170min.	approx. 112min.	approx. 256min.	approx. 170min.	approx. 512min.	approx. 256min.
SDHC/ MMCplus	1GB	approx. 43min.	approx. 28min.	approx. 64min.	approx. 43min.	approx. 128min.	approx. 64min.
	2GB	approx. 85min.	approx. 56min.	approx. 128min.	approx. 85min.	approx. 256min.	approx. 128min.
	4GB	approx. 170min.	approx. 112min.	approx. 256min.	approx. 170min.	approx. 512min.	approx. 256min.

1GB=1,000,000,000bytes : actual formatted capacity may be less as the internal firmware uses a portion of the memory.



- 288p, 576i/576p refer to resolutions the camcorder will record at.
- The above figures are measured under Samsung's standard recording test conditions and may differ depending on the test or use condition.
- The memory camcorder provides three quality options for movie recordings:
 - "**Super Fine**", "**Fine**", "**Normal**". For a same scene, higher quality setting will retain the better image with bigger data size in the order of "**Super Fine**", "**Fine**", "**Normal**".
- The compression rate increases while lowering the quality (in the order of "**Fine**", "**Normal**"). The higher the compression rate is, the picture quality is more deteriorated but the recording time will be increased.
- The compression rate automatically adjusts to the recording image, and the recording time may vary accordingly.



- **You can use a SDHC or MMCplus memory card on your memory camcorder.**

Some cards may not be compatible depending on the memory card manufacturer and memory card type.

- Proper operation is not guaranteed for those memory cards that are not formatted by this memory camcorder. Perform the formatting directly on the memory camcorder for formatting.
- To facilitate the movie recording, it is recommended to use a memory card that supports faster write speed. (Write speed: 1.25 MB / sec or higher) If you use a low write-speed memory card, recording may stop with a message of **"Low speed card. Please record at lower quality"**. If you inevitably use a low speed card, select a lower quality ("**Fine**" → "**Normal**") or set the movie size to **352p**.
- It supports proper operation with up to **8GB** of memory card for movie recording / playback. Memory cards of bigger than **8GB** in capacity may not work properly.
- The memory card that is used to store a movie can cause unwritable area, which may result in reduced recording time and free memory space.
- The maximum size of a movie (MPEG4) file that can be recorded at one time is 2GB.
- You can store up to 5000 movie images on a memory card.
- The movie image files recorded by other equipment are not playable on this memory camcorder.
- Built-in memory used in the VP-MX10A/MX10AU/MX10AH only.

To check the capacity that remains on the memory

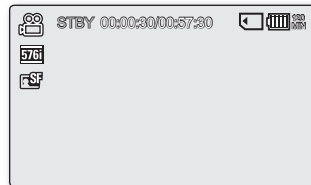
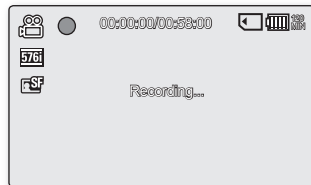
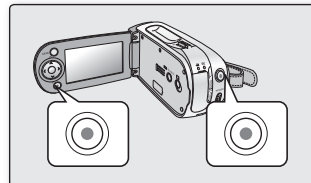
- Press the  /  CHECK button. ➡ page 16

recording

Basic procedures to record movie images described below.

RECORDING MOVIE IMAGES

- Memory camcorder provides two **Recording start/stop** buttons. One is on the rear side of the camcorder and the other one is on the LCD panel. Select the **Recording start/ stop** button according to the use.
- Turn the memory camcorder on.
 - Connect a power source to the memory camcorder. ➡ pages 12,18 (A battery pack or an AC power adapter)
 - Slide the **POWER** switch downward to turn on the power. ➡ page 21
 - Set the appropriate storage media. (VP-MX10A/MX10AU/MX10AH only) (If you want to record on a memory card, insert the memory card.)
 - Check the subject on the LCD screen.
 - Press the **Recording start/stop** button.
 - The recording indicator (●) will display and recording will start.
 - Pressing the **Recording start/stop** button again during recording will set the memory camcorder to recording pause mode.
 - When recording is finished, turn the memory camcorder off.
 - Setting the display option of "16:9 Wide" does not imply wide angle (wide aspect ratio) recording. Camera output, recording and playback signal is formatted to 4:3 aspect ratio.
 - Please note that all movies recorded with this memory camcorder have 4:3 aspect ratio regardless of the display option (16:9 Wide/4:3). When it is set to "16:9 Wide", the displayed picture may appear wider or rougher than that of 4:3 screen aspect ratio. ➡ pages 55,61







- Eject the battery pack when you have finished recording to prevent unnecessary battery power consumption.
- For on-screen information display. ➡page 22
- For approximate recording time. ➡page 36
- For various functions available when you record movie images. ➡page 45~56
- If focusing is difficult, use the manual focus function. ➡page 53
- During recording, some button operations are unavailable. (**MENU** button, etc.)
- Sound is recorded from the internal stereo microphone on the front of the memory camcorder. Take care that this microphone is not blocked.
- Before recording an important movie, make sure to test on the recording function to check if there is any problem with the audio and video recording.
- While recording, don't insert or eject the memory card as it may record noise. (VP-MX10A/MX10AU/MX10AH only)
- Do not operate the power switch or remove the memory card while accessing the storage media. Doing so may damage the storage media or the data on storage media.
- You can not use a locked memory card for recording. You will see a message saying recording is disabled due to the lock.
- If you press the **Recording start/stop** button while a menu operation is in process, the product returns to recording pause mode.

recording

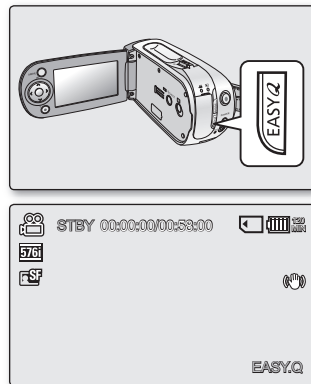
RECORDING WITH EASE FOR BEGINNERS (EASY. Q MODE)

- With the EASY. Q function, most of the memory camcorder settings are automatically adjusted, which frees you from detailed adjustments.
1. Slide the **POWER** switch downward to turn on the memory camcorder.
 2. Press the **MODE** button to set Movie Record mode (). ➔page 21
 3. Press the **EASY. Q** button.
 - When you press the **EASY. Q** button, all functions on the memory camcorder will be set to off and the recording settings will be set to the following basic modes.
(Scene Mode(AE), White Balance, Auto Exposure, Anti-Shake(EIS), Digital Effect, Auto Focus and Back Light)
 - The EASY. Q and **Anti-Shake(EIS)** () indicator appear on the screen at the same time.
 4. To record movie images, press the **Recording start/stop** button.
 - Recording will begin using the basic automatic settings.

To cancel EASY. Q mode

Press the **EASY. Q** button again.

- The EASY.Q and **Anti-Shake (EIS)** () indicators disappear from the screen.



Unavailable buttons during operation

- The following button and menu operations are unavailable because the items are automatically set. And the corresponding message (" **Release the EASY.Q** ") may appear if unavailable operations are attempted.
 - **MENU** button
 - **OK** button
 - etc.
- Cancel EASY.Q function if you want to add any effect or settings to the images.
- The EASY.Q mode settings are released when the memory camcorder is turned off.
- EASY.Q mode automatically sets the "**Anti-Shake(EIS)**" to "**On**" while using EASY.Q.

ZOOMING

Use the zoom function for close-up or wide-angle recording.

This memory camcorder allows you to record using optical 34x power zoom and 1200x digital zoom.

- You can zoom with the Zoom lever or the zoom (W/T) button on the LCD panel.
- The further you slide the Zoom lever, the quicker the zoom action.

To zoom in

- Slide the Zoom lever towards **T** (telephoto).

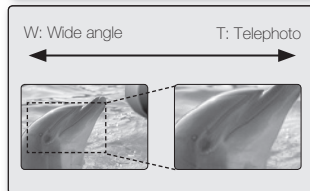
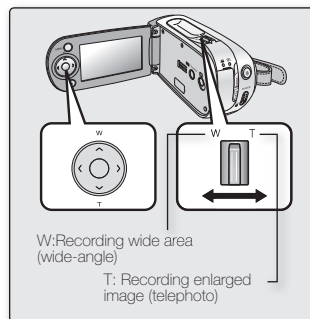
To zoom out

- Slide the Zoom lever towards **W** (wide-angle).

- Zoom magnification over 34x is done through digital image processing, and is therefore called digital zoom. Digital zooming is possible up to 1200x. Set "**Digital Zoom**" to "**On**". ➡page 56



- Be sure to keep your finger on the Zoom lever. If you move your finger off the zoom lever, the operation sound of the Zoom lever may be also recorded.
- You can also zoom with the Zoom (W/T) button on the LCD panel.
- The minimum possible distance between camcorder and subject while maintaining sharp focus is about 1 cm (about 0.39 inch) for wide angle and 50 cm (about 19.68 inch) for telephoto.
- Focusing may become unstable during zooming. In this case, set the zoom before recording and lock the focus by using the manual focus, then zoom in or out during recording. ➡page 53
- Optical zoom preserves the movie quality, but during digital zoom the quality of image may suffer.



playback

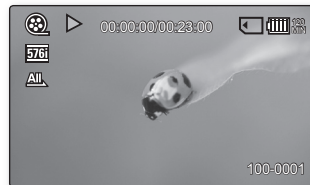
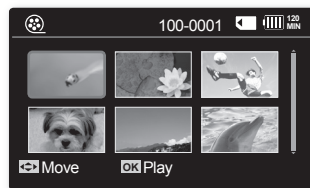
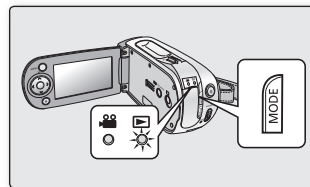
MOVIE IMAGES PLAYBACK

You can find a desired movie image quickly using thumbnail index view.

1. Turn the memory camcorder on.
 - Slide the **POWER** switch downward to turn on the power. ➡page 21
 - Set the appropriate storage media. ➡page 32 (VP-MX10A/MX10AU/MX10AH only)
(If you want to record on a memory card, insert the memory card.)
2. Open the LCD screen.
 - Adjust brightness or contrast of the LCD screen. ➡page 65
3. Press the **MODE** button.
 - Switches to Movie Play mode.
 - The recorded movie images are displayed in thumbnail index view.
4. Use the **Control** button (▲/▼/◀/▶) to select the desired movie images, and the press the **OK** button.
 - Shortcut menu for playback will be displayed for a while.
 - Each time you press the **OK** button, play or pause is toggled.
 - If you move the zoom lever during playback, the camcorder switches to thumbnail index view.



Please note that all movies recorded with this memory camcorder have 4:3 aspect ratio regardless of the display option (16:9 Wide/4:3). When it is set to "16:9 Wide", the displayed picture may appear wider or rougher than that of 4:3 screen aspect ratio. ➡pages 55,61





- **A video codec is required to play the recorded movie images on a PC.**

Install the software in the provided software CD to have the CODEC automatically installed in the system.

If you do not have the software CD, search the product model name in the download centre on the Samsung Electronics home page (www.samsung.com) to get the CODEC installation file. ➡ page 71

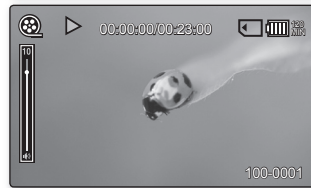
- During playback, pressing the **Recording start/stop** button will move to Movie Record mode.
- If there is no file stored to view, the message **"Empty"** appears.
- When the multi-AV cable is connected to the memory camcorder, the built-in speaker will automatically turn off.
- Depending on the amount of data to be played back, it may take some time for the playback images to appear.
- Image data edited on PC or certain types of image data may not be displayed on this memory camcorder.
- Image data recorded on another camcorder may not be playable on this memory camcorder.
- You can also play movie images on a TV screen by connecting the memory camcorder to a TV. ➡ page 77
- For various functions available during playback, see **"playback options"**. ➡ pages 57~61

Adjusting the volume

- You can hear the recorded sound from the built-in speaker.
- You can control the volume by using the **Control** button (▲/▼).
- The level can be adjusted anywhere between 0 and 10.
(If you close the LCD screen while playing, you will not hear the sound from the speaker.)

Press the **Control** button (▲/▼) to increase or decrease the volume.

- The volume bar disappears after 1~2 seconds.



playback

Various Playback Operations

Still playback (pause)

- Press the **OK** button during playback.
 - To resume normal playback, press the **OK** button again.

Search playback or movie

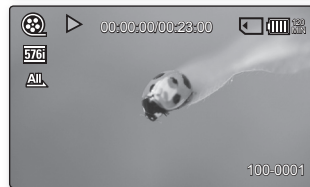
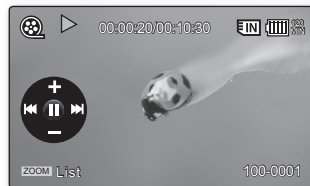
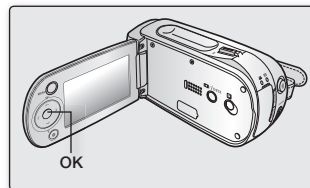
- During normal playback, press and hold the **Control** button (**>**) for forward search, or to the left for reverse search.
- Moving the **Control** button to (**</>**) repeatedly increases the search speed for each direction.
 - RPS(Reverse Playback Search) rate: x2→x4→x8→x16→x32→x64
 - FPS(Forward Playback Search) rate: x2→x4→x8→x16→x32→x64
- To resume normal playback, press the **OK** button.

Skip playback of movie

- During playback, press the **Control** button (**>**) to locate the start point of next file. Pressing the **Control** button (**>**) repeatedly skips files in forward direction.
- During playback, press the **Control** button (**<**) to locate the start point of the current file, pressing the **Control** button (**<**) repeatedly skips files in reverse direction.
- Press the **Control** button (**<**) within 3 seconds from the start point, it skips to the first image of the previous file.

Frame-by-frame playback

- While playback is paused, press the **Control** button (**>**).
 - Pressing the **Control** button (**>**) repeatedly advances the still picture frame by frame.
 - While playback is paused, press and hold the **Control** button to (**>**), it plays back frame by frame just like slow motion playback.
 - To resume normal playback, press the **OK** button.




recording options

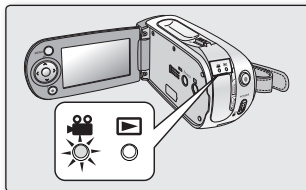
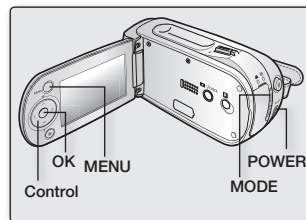
CHANGING THE MENU SETTINGS

You can change the menu settings to customize your memory camcorder.

Access the desired menu screen by following the steps below, then change the various settings.

1. Slide **POWER** switch downward to turn the memory camcorder on.
2. Select the operation mode.
 - For Movie Record Menus: Press **MODE** button to set Record (📹).
 - For Movie Play Menus: Press **MODE** button to set Play (▶).
3. Press **MENU** button.
 - The menu screen appears.
4. Select the desired sub menu and menu item with the **Control** buttons and the **OK** button.
 - To return to the normal screen, press **MENU** button.
 - Depending on the mode selected not all items will be selectable to be changed.
➡page 85

-  • You can also access the shortcut menu using the **OK** button. ➡page 29
- While the menu screen is displayed, pressing the **Recording start/stop** button will move to Movie Record mode.



Button Tips


- a. **MENU** button : Use it to enter or exit the menu.
- b. **Control** button (▲/▼/◀/▶) : Use it to move up/down/left/right
- c. **OK** button : Use it to select or confirm the menu.

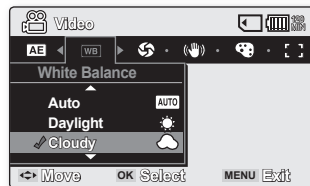
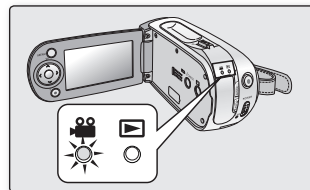
recording options

★ Follow the instructions below to use each of the menu items listed after this page.

For example: setting the White Balance in Movie Record mode.

1. Slide the **POWER** switch downward to turn the memory camcorder on.
2. Select the operation mode.
 - For Movie Record Menus:
Press **MODE** button to set Record (📹).
3. Press **MENU** button.
 - The menu screen appears.
4. Press the **Control** button (◀/▶) to select "**White Balance**".
5. Select the desired sub menu item with the **Control** button (▲/▼), and then press the **OK** button.
6. Press **MENU** button to exit the menu.

-  • The selected item is applied and the indicator is displayed. But in case of some item just like "**Auto**", the item indicator may not displayed on the screen.
- While the menu screen is displayed, pressing the **Recording start/stop** button will move to Movie Record mode.
 - You can also change the menu setting, using the shortcut menu represents the most frequently accessed functions. ➡ page 29



MENU ITEMS

- Accessible items in menu can vary depending on the operation mode.
- For operation details, see the corresponding page. ➡ pages 45~46, 57~61

Menu items in Movie Record()

Items	Default value	Page
Scene Mode (AE)	Auto	48
White Balance	Auto	49
Exposure	Auto	50
Anti-Shake (EIS)	Off	51
Digital Effect	Off	52
Focus	Auto	53
Back Light	Off	54
16:9 Wide	On	55
Quality	Super Fine	55
Resolution	720x576i	56
Digital Zoom	Off	56

Menu items in Movie Play()

Items	Default value	Page
Play Option	Play All	57
Delete	OK	58
Protect	On	59
Copy (VP-MX10A/MX10AU/MX10AH only)	-	60
16:9 Wide	On	61
File Info	OK	61






recording options

RECORDING MENU ITEMS

You can setup the menu items for movie images recording.

Scene Mode (AE)

This memory camcorder automatically sets the shutter speed and aperture according to the subject brightness for optimum recording: You can also specify one of five modes depending on subject conditions, recording environment or purpose of filming.

item	contents	on-screen display
"Auto"	<ul style="list-style-type: none">- Auto balance between the subject and the background.- To be used in normal conditions.- The shutter speed is automatically adjusted from 1/50 to 1/250 per second, depending on the scene.	None
"Sports"	<ul style="list-style-type: none">- Reduces blurring when recording rapidly moving subjects such as in golf or tennis. If the Sports mode is used under a fluorescent light, the image may flicker. In this case, use the Auto mode for recording.	
"Portrait"	<ul style="list-style-type: none">- Creates a shallow depth of field so that the person or subject appears against a softened background.- The portrait mode is most effective when used outdoors.- The shutter speed is automatically adjusted from 1/50 to 1/1000 per second.	
"Spotlight"	<ul style="list-style-type: none">- Prevents overexposure of subject portrait face, etc. when strong light strikes the subject, as in a wedding or on stage.	
"Beach/Snow"	<ul style="list-style-type: none">- Prevents under exposure of subject portrait face, etc. in a place where reflection of light is intense, such as at the seaside in summer or on a ski slope.	
"High Speed"	<ul style="list-style-type: none">- For recording fast-moving subjects such as golfers or tennis matches.	





- If you set the Exposure to manual, **"Scene Mode (AE)"** will be disabled. ➡page 50
- This function will not operate in the EASY. Q mode.
- You can check the selected **"Scene Mode (AE)"** on the on-screen information display. However, nothing will appear in **"Auto"** mode.

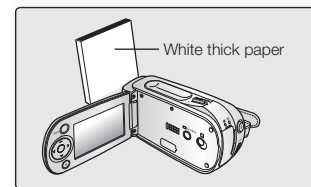
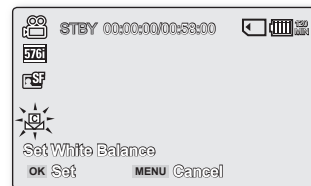
White Balance

This memory camcorder automatically adjusts the colour of subject. Change the white balance setting depending on the recording conditions.

item	contents	on-screen display
"Auto"	This option is generally used to control the white balance automatically.	None
"Daylight"	This controls the white balance according to the outdoor ambience, especially for close up and where the subject is of one dominant colour.	
"Cloudy"	This option is used when you make a recording in a cloudy weather.	
"Fluorescent "	This option is used when you make a recording under white fluorescent lights.	
"Tungsten"	This option is used when the surroundings are in less than 3200K of tungsten lights such as fluorescent lights.	
"Custom WB"	You can manually adjust white balance to match the light source or situation.	

Setting the white balance manually:

- Select **"Custom WB"**.
 - The indicator () and the message **"Set White Balance"** are displayed.
- Frame a white object such as a piece of paper so that it fills the screen. Use an object that is not transparent.
 - If the object that fills the screen is not focused, correct the focus using **"Manual Focus"** ➔ page 53
- Press the **OK** button.
 - The white balance setting will be applied and indicator () is displayed.



recording options



- A subject can be recorded under various types of lighting conditions indoors (natural, fluorescent, candlelight, etc.). Because the colour temperature is different depending on the light source, the subject tint will differ depending on the white balance settings. Use this function for a more natural result.
- The white balance also can be set in the shortcut menu. ➡page 29.
- The white balance can not use while EASY Q is in use.
- It is recommended that you specify **"Digital Zoom"** to **"Off"** before setting white balance. ➡page 56
- Reset the white balance if lighting conditions change.
- During normal outdoor recording, setting to auto may provide better results.
- Do not use a coloured object when setting white balance: The appropriate tint cannot be set.

Exposure

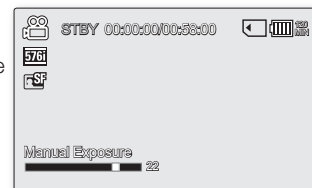
The memory camcorder usually adjusts the exposure automatically. You can also manually adjust the exposure depending on the recording conditions.

item	contents	on-screen display
"Auto"	This option automatically adjusts image brightness according to the environmental light conditions.	None
"Manual"	<ul style="list-style-type: none">- You can adjust the brightness of an image manually.- Adjust the brightness when the subject is too bright or too dark.	

Setting the exposure manually:

When manually setting the exposure, the default setting appears as the value is automatically adjusted according to the environmental light conditions.

- Press the **Control** button (**< / >**) to adjust the exposure while viewing the image on the LCD screen.
 - Confirm your selection by pressing the **OK** button.
 - Exposure value can be set between **"0"** and **"29"**.
 - If you set exposure to manual, the higher the exposure, the brighter the recorded picture will be.



Manual exposure is recommended in situations listed below :

- When shooting using reverse lighting or when the background is too bright.
- When shooting on a reflective natural background such as at the beach or when skiing.
- When the background is overly dark or the subject is bright.



- The exposure also can be set in the shortcut menu. ➡ page 29
- EASY. Q mode automatically sets the **"Exposure"** to **"Auto"**.
 - If you manually change the exposure value when **"Scene Mode(AE)"** function is selected, manual changes are applied first.

Anti-Shake(EIS) (Electronic Image Stabilizer)

When you use zoom to record a magnified subject image, it will correct fuzziness in the recorded image.

item	contents	on-screen display
"Off"	Disables the function.	None
"On"	Compensates for unstable images caused by camcorder-shake, particularly at high magnification.	

Anti-Shake(EIS) provides a more stable image when:

- Recording while zooming
- Recording small objects
- Recording while walking or moving
- Recording through the window of a moving vehicle









- EASY. Q mode automatically sets the **"Anti-Shake(EIS)"** to **"On"** while using EASY. Q.
- When **"Anti-Shake(EIS) : On"** is specified, there will be a slight difference between the actual movement and the movement on screen.
- Large camcorder shake may not be entirely corrected even if **"Anti-Shake(EIS) : On"** is specified. Firmly hold the memory camcorder with both hands.
- It is recommended that you specify **"Anti-Shake(EIS): Off "** when using the memory camcorder on a desk or tripod.
- When you record pictures with 34x or more magnification and the **"Anti-Shake(EIS)"** is **"On"** in dim places, after-images may stand out. In this case, we recommend using a tripod and turning the **"Anti-Shake(EIS)"** to **"Off"**.

recording options

Digital Effect

- The digital effect enables you to give a creative look to your recording.
- Select the appropriate digital effect for the type of picture that you wish to record and the effect you wish to create.
- There are 6 different digital effect options.

item	contents	on-screen display
"Off"	Disables the function.	None
"Black&White"	Changes the images into Black and White.	
"Sepia "	This mode gives the images a reddish brown pigment.	
"Negative"	Reverses the colours, creating the look of a negative.	
"Art"	Adds artistic effects to your movie file.	
"Mosaic"	A mosaic overlay appears on your movie file.	
"Mirror"	This mode cuts the image in half using a Mirror effect.	



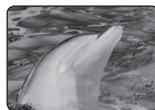
The digital effects can not use while EASY. Q is in use.



Black&White



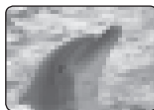
Sepia



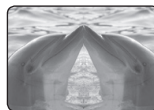
Negative



Art




Mosaic



Mirror

Focus

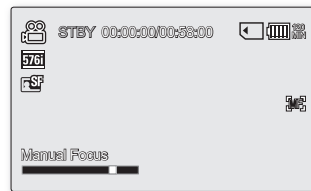
- The memory camcorder usually focuses on a subject automatically (auto-focus).
- You can also manually focus a subject depending on the recording conditions.

item	contents	on-screen display
"Auto"	This memory camcorder automatically focuses a subject at the centre of screen (auto-focus). When the memory camcorder is turned on, auto-focus will always be set.	None
"Manual"	Manual focusing may be necessary under certain conditions that make automatic focusing difficult or unreliable.	

Focusing manually during recording

This memory camcorder automatically focuses a subject from close-up to infinity. However, the correct focus may not be obtained depending on the recording condition. In this case, use the manual focus mode.

1. Select **"Focus"** to **"Manual"**.
 - The manual focus adjustment indicator appears.
2. Use the zoom lever to zoom in on subject.
3. Press the **Control** button (**</>**) to adjust the focus, while viewing the subject on the LCD screen.



Focusing on a further subject

To focus on a further subject, press the **Control** button (**<**).

Focusing in a nearer subject

To focus on a nearer subject, press the **Control** button (**>**).

Manual focus is recommended in the following situations :

- a. A picture containing several objects, some close to the memory camcorder, others further away.
- b. A person enveloped in fog or surrounded by snow.
- c. Very shiny or glossy surfaces like a car.
- d. People or objects moving constantly or quickly like an athlete or a crowd.



- The focus also can be set in the shortcut menu. ➡ page 29
- EASY. Q mode automatically sets the **"Focus"** to **"Auto"**.
- Be sure to zoom in on your subject before manually focusing on it. If you bring the subject into focus at the **"W"** control side, focus will be faulty when you turn the zoom lever to the **"T"** control side to zoom in on the subject.



<Nearer subject >




<Further subject >

recording options

Back Light

When subject is lit from behind, this function will compensate for lighting so that the subject is not too dark.

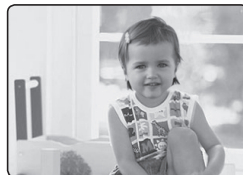
item	contents	on-screen display
"Off"	Disables the function.	None
"On"	<ul style="list-style-type: none">- Backlight compensation is executed.- Backlight compensation brightens the subject quickly.	

Back lighting influences recording when the subject is darker than the background:

- The subject is in front of a window.
- The subject is against a snowy background.
- The subject is outdoors and the background is overcast.
- The light sources are too bright.
- The person to be recorded is wearing white or shiny clothes and is placed against a bright background:
The person's face is too dark to distinguish his/her features.



<BLC off>



<BLC on>



The **"Back Light"** function can not use while EASY. Q is in use.

16:9 Wide

You can select the desired LCD display aspect ratio for recording or playback (16:9 Wide/4:3 aspect ratio).

item	contents	on-screen display
"Off"	Disables the function. Displays the image in 4:3 aspect ratio. Select to use the standard display aspect ratio of 4:3 on the screen.	None
"On"	Select to view movies of 4:3 aspect ratio by enlarging and fitting into 16:9 aspect ratio.	None



- 16:9 wide setting also can be set in the shortcut menu. ➡page 29.
- Please note that all movies recorded with this memory camcorder have 4:3 aspect ratio regardless of the display option (16:9 Wide/4:3). When it is set to "16:9 Wide", the displayed picture may appear wider or rougher than that of 4:3 screen aspect ratio.

Quality

You can select the quality of a movie to be recorded. This memory camcorder can record in the **SF** (super fine), **F** (fine) and **N** (normal) modes.

item	contents	on-screen display
"Super Fine"	Displays in the supreme quality.	
"Fine"	Displays in high quality.	
"Normal"	Displays in normal quality.	



You can record a scene at three quality levels: **"Super Fine, Fine, or Normal"**.




However, the better the quality is, the more memory is used.

- The recording times depend on the quality of a movie to be recorded. ➡page 36

recording options

Resolution

- You can select the resolution of a movie to be recorded.

item	contents	on-screen display
"720x576i"	Resolution of the movie played on a TV screen.	
"720x576p"	Higher resolution of the movie played on a PC screen.	
"352x288p"	Lower resolution of the movie played on a PC screen.	



- High resolution images use more memory than lower resolution images. Therefore the higher the resolution selected, the fewer will be the available time available.
- The recording times depend on the resolution. ➡page 36
- When the screen size is set to 352(352x288p), it is played back in smaller size than 720(720x576p) on PC.

Digital Zoom

- You can select the maximum zoom level in case you want to zoom to a level greater than 34x (the default setting) during recording. Up to 34x zoom is performed optically, and after that, up to 1200X zoom is performed digitally. Note that the image quality decrease when you use the digital zoom.

item	contents	on-screen display
"Off"	Only optical zoom is available up to 34x.	-
"On"	Digital zoom is available up to 1200x. Moving the zoom lever will display the digital zoom bar.	-



- You can also zoom with the zoom (W/T) button on the LCD panel.
- The image quality may deteriorate depending on how much you zoom in on the subject.
- Maximum zooming may result in lower image quality.



playback options


- You can manage recorded movie images in various ways.
- Each thumbnail image shown in the display represents the first frame of a separately recorded movie.

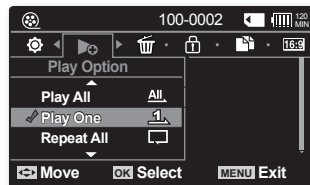
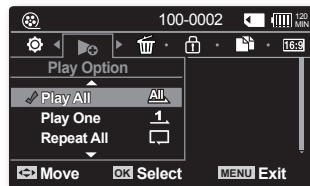
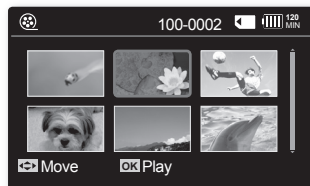
SETTING THE PLAY OPTION

- You can play all images continuously or play the selected image only.
- You can also set the repeat option for all images.

1. Slide the **POWER** switch downward to turn on the memory camcorder.
 - Set the appropriate storage media. (VP-MX10A/MX10AU/MX10AH only)
(If you want to record on a memory card, insert the memory card.)
2. Press the **MODE** button. ➔ page 21
 - Switches to Movie Play mode.
The recorded movie images are displayed in thumbnail index view.
3. Press the **MENU** button.
 - Press the **Control** button (< / >) to select "**Play Option**".
4. Press the **Control** button (^ / v) to select an option, and then press the **OK** button.

item	contents
"Play All"	Plays back from the selected image to the last image.
"Play One"	The selected movie images will be played.
"Repeat All"	All movie images will be played repeatedly.
"Repeat One"	The selected movie images will be played repeat.

5. Press the **MENU** button to exit the menu.
 - During playback, the selected item is applied
-  While the menu or thumbnail image screen is displayed, pressing the **Recording start/stop** button will move to the Movie Record mode.
- It operates identically in the single image display.



playback options

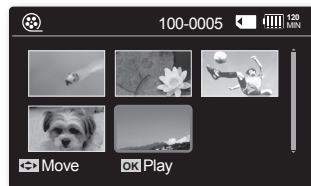
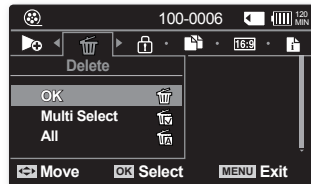
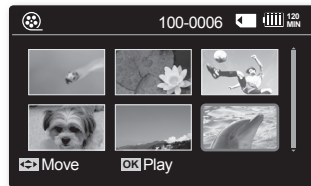
DELETING MOVIE IMAGES

- You can delete saved movie images.
1. Slide the **POWER** switch downward to turn on the memory camcorder.
 - Set the appropriate storage media. (VP-MX10A/MX10AU/MX10AH only)
(If you want to record on a memory card, insert the memory card.)
 2. Press the **MODE** button. ➡page 21
 - Switches to Movie Play mode.
 - Select the desired movie images, using the **Control** button.
 3. Press the **MENU** button.
 4. Press the **Control** button (◀/▶) to select "**Delete**".
 5. Select an option by pressing the **Control** button (▲/▼) and then press the **OK** button.

item	contents
"OK"	Deletes the selected movie image.
"Multi Select"	Deletes individual selected movie images. -To delete individual movie images, select desired movie images to delete by pressing the OK button. And then press the MENU button to delete. -The indicator (🗑️) is displayed on the selected movie images. -Pressing the OK button toggles the selection and release.
"All"	Deletes all movie images.

6. The pop-up selection menu will appear depending on the selected menu item.
In this case, select the desired item with the **Control** buttons (◀/▶) and the **OK** button.

- Accordingly the deleted images also disappear in thumbnail images.
- 🔑 While the menu or thumbnail image screen is displayed, pressing the **Recording start/stop** button will move to Movie Record mode.
- It operates identically in the single image display.
- Once deleted, a image can not be restored.
- Protected files will not be deleted.



PROTECTING MOVIE IMAGES

- You can protect saved important movie images from accidental deletion.
- Protected images will not be deleted unless you release the protection or format the memory.

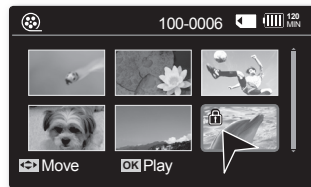
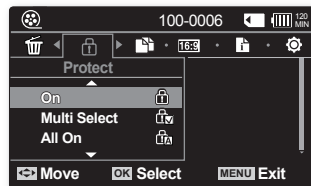
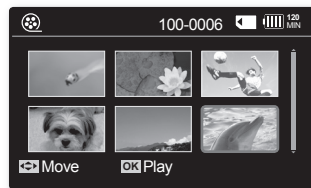
1. Slide the **POWER** switch downward to turn on the memory camcorder.
 - Set the appropriate storage media. (VP-MX10A/MX10AU/MX10AH only)
(If you want to record on a memory card, insert the memory card.)
2. Press the **MODE** button. ➡ page 21
 - Switches to Movie Play mode.
 - Select the desired movie images, using the **Control** button.
3. Press the **MENU** button.
 - Menu screen appears.
4. Press the **Control** button (< / >) to select "**Protect**".
5. Select an option by pressing the **Control** button (^ / v) and then press the **OK** button.

item	contents
"On"	Protects the selected movie image from deletion.
"Multi Select"	Protects selected movie images from deletion - To protect individual movie images, select desired movie images by pressing the OK button. And then press the MENU button to confirm. - The indicator (🔒) is displayed on the selected movie images. - Pressing the OK button toggles the selection and release.
"All On"	Protects all movie images.
"All Off"	Cancels the protection for all movie images.

6. The pop-up selection menu will appear depending on the selected menu item.
In this case, select the desired item with the **Control** buttons (< / >) and the **OK** button



- While the menu or thumbnail image screen is displayed, pressing the **Recording start/stop** button will move to Movie Record mode.
- It operates identically in the single image display.
- Protected movie images will show the indicator (🔒) when they are displayed.
- If the write protection tab on the memory card is set to lock, you cannot set image protection.




playback options

COPYING MOVIE IMAGES (VP-MX10A/MX10AU/MX10AH ONLY)

- Movie images are copied to the destination storage with leaving original movie images in the source storage.
- It copies from the currently-used memory to another. For example, if the built-in memory was used, it copies to a memory card.

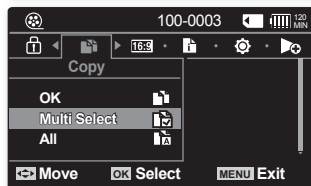
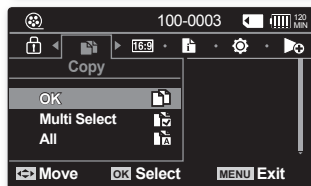
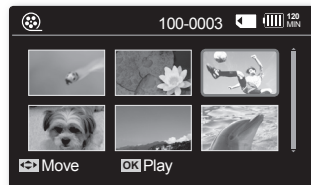
1. Slide the **POWER** switch downward to turn on the memory camcorder.
 - Set the appropriate storage media. (VP-MX10A/MX10AU/MX10AH only)
(If you want to record on a memory card, insert the memory card.)
2. Press the **MODE** button. ➡ page 21
 - Switches to Movie Play mode.
 - Select the desired movie images, using the **Control** button.
3. Press the **MENU** button.
 - Menu screen appears.
4. Press the **Control** button (< / >) to select "**Copy**".
5. Select an option by pressing the **Control** button (^ / v) and then press the **OK** button.

item	contents
"OK"	Copies the selected movie images.
"Multi Select"	Copies the individual movie images. <ul style="list-style-type: none">- To copy individual movie images, select desired movie images by pressing the OK button.- The indicator () is displayed on the selected movie images. And then press the MENU button to confirm.- Pressing the OK button toggles the selection and release.
"All "	Copies all the movie images.

6. The pop-up selection menu will appear depending on the selected menu item. In this case, select the desired item with the **Control** buttons (< / >) and then the **OK** button.




- While the menu or thumbnail image screen is displayed, pressing the **Recording start/stop** button will move to Movie Record mode.
- It operates identically in the single image display.
- If a memory card is not inserted, you can not perform the "**Copy**" function.



16:9 WIDE




You can select the desired LCD display aspect ratio for recording or playback (16:9 Wide/4:3 aspect ratio).

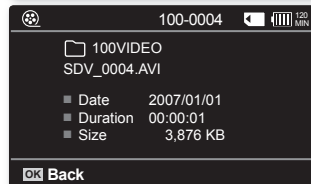
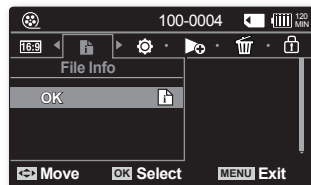
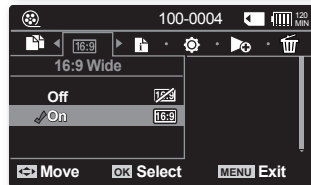
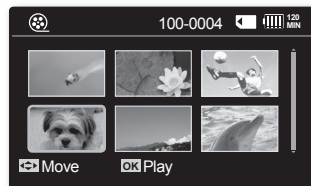
item	contents	on-screen display
"Off"	Disables the function. Displays the image in 4:3 aspect ratio. Select to use the standard display aspect ratio of 4:3 on the screen.	None
"On"	Select to view movies of 4:3 aspect ratio by enlarging and fitting into 16:9 aspect ratio.	None

 Please note that all movies recorded with this memory camcorder have 4:3 aspect ratio regardless of the display option (16:9 Wide/4:3). When it is set to "16:9 Wide", the displayed picture may appear wider or rougher than that of 4:3 screen aspect ratio.

FILE INFORMATION

You can see the image information for all images.

- Slide the **POWER** switch downward to turn on the memory camcorder.
 - Set the appropriate storage media. (VP-MX10A/MX10AU/MX10AH only)
(If you want to record on a memory card, insert the memory card.)
- Press the **MODE** button.  page 21
 - Switches to Movie Play mode.
- Select the desired movie images, using the **Control** button.
- Press the **MENU** button.
- Press the **Control** button ( / ) to select "**File Info**".
- Press the **OK** button.
 - Press the **OK** button again after confirming.
 - The information of the selected file is displayed as shown below.
 - Date
 - Duration
 - Size



setting options

CHANGING THE MENU SETTINGS IN "SETTINGS"

You can change the menu settings to customize your memory camcorder. Access the desired menu screen by following the steps below and change the various settings.

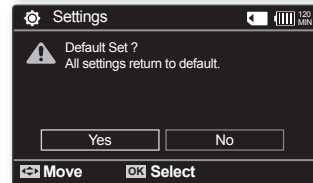
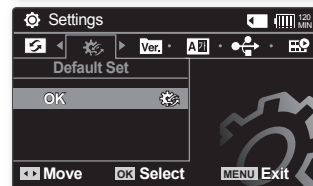
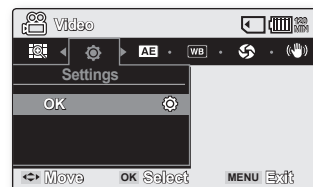
1. Slide **POWER** switch downward to turn the memory camcorder on.
2. Press **MENU** button.
 - The menu screen appears.
3. Select "**Settings**" with the **Control** button (**</>**), and then press the **OK** button.
 - The menus in "**Settings**" mode will appear.
4. Select the desired sub menu and menu item with the **Control** buttons (**▲/▼/◀/▶**) and the **OK** button.
 - To return to the normal screen, press **MENU** button.
 - Depending on the mode selected not all items will be selectable to be changed.
(If there is no storage media inserted, it can not be selected and will be dimmed on the menu: "**Memory Info**", "**Format**", etc.) ➡page 92

Button Tips

- a. **MENU** button : Use it to enter or exit the menu.
- b. **Control** button (**▲/▼/◀/▶**) : Use it to move up/down/left/right
- c. **OK** button : Use it to select or confirm the menu.



The pop-up selection menu will appear depending on the selected menu item. In this case, select the desired item with the **Control** buttons (**</>**) and the **OK** button.



You can setup the date/time, OSD language and display settings of the memory camcorder.

SETTING MENU ITEMS

Items	Default values	Page
Date/Time Set	2007/01/01 12:00 AM	64
Date Format	YY/MM/DD	64
Time Format	12 Hr	64
Date/Time	Off	64
LCD Brightness	40%	65
LCD Colour	50%	65
Auto Power Off	Off	65
Beep Sound	On	66
File No.	Series	66
Memory Type (VP-MX10A/MX10AU/MX10AH only)	-	66
Memory Info	OK	67
Format	OK	67
Default Set	OK	68
Version	-	68
Language	English	68
USB Connect	Mass Storage	68
Demo	Off	68



These Items and Default values may be changed without notice.

setting options

Date/Time Set

Set the current date and time so that the date and time at which you make a recording can be recorded correctly. ➡page 31

Date Format

You can select the date format to display.

settings	contents	on-screen display
"YY/MM/DD"	The date is displayed in the order of year / month / date.	-
"DD/MM/YY"	The date is displayed in the order of date / month / year.	-
"MM/DD/YY"	The date is displayed in the order of month / date / year.	-

Time Format

You can select the time format to display.

settings	contents	on-screen display
"12 Hr"	The time is displayed as the unit of 12 hours.	-
"24 Hr"	The time is displayed as the unit of 24 hours.	-

Date/Time

You can set to display date and time on the LCD monitor.

- Before you use the **"Date/Time"** function, you must set the date/time. ➡page 31

settings	contents	on-screen display
"Off"	The date and time are not displayed.	None
"Date"	The date is displayed.	2007/01/01
"Time"	The time is displayed.	12:00AM
"Date & Time"	The date and time are displayed.	2007/01/01 12:00AM



The date/time will read **"2007/01/01 12:00 AM"** in the following conditions.

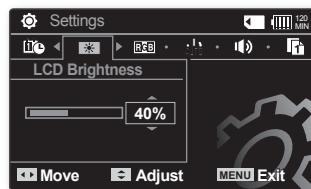
- When the button type battery becomes weak or dead.

LCD Brightness

- You can adjust the brightness of the LCD screen to compensate for ambient lighting conditions.
- Moving the **Control** button up will brighten the screen whereas moving it down will darken the screen.

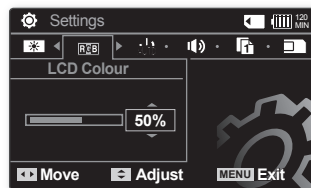


- A brighter LCD screen setting consumes more battery power.
- Adjust the LCD brightness when the ambient lighting is too bright and the monitor is hard to see.
- LCD Brightness does not affect the brightness of images to be stored.
- You can adjust the LCD Brightness from 0% to 100%.



LCD Colour

- You can adjust the LCD colour from 0% to 100%.
- When you set colour range, the higher the figures the brighter the LCD monitor will be.



Auto Power Off

To save battery power, you can set the **"Auto Power Off"** function which turns off the memory camcorder if there is no operation for a certain period of time.

settings	contents	on-screen display
"Off"	Cancels the "Auto Power Off" function.	None
"5 Min"	The memory camcorder automatically turns off when there is no operation for 5 min.	None



- The **"Auto Power Off"** will not function when you connect the AC power adapter to the memory camcorder. The **"Auto Power Off"** functions when the battery pack is the only power source.
- If you connect the camcorder to the USB device (PC, etc.) through USB cable, the **"Auto Power Off"** will not function.
- **"Auto Power Off"** will only function when you set this function in settings mode.

setting options

Beep Sound

You can set the beep sound to on/off. When on, a beep will sound every time a button is pressed.

settings	contents	on-screen display
"Off"	Disables the function	None
"On"	The beep sounds when operate the menu settings, the power is turned on.	None

File No.

File numbers are assigned to movie files in the order they were recorded.

settings	contents	on-screen display
"Series"	Assigns file numbers in sequence even if the memory card is replaced with another one or after formatting, or after deleting all files. The file number is reset when a new folder is created.	None
"Reset"	Resets the file number to 0001 even after formatting, deleting all or inserting a new memory card.	None



When you set "**File No.**" to "**Series**", each file is assigned with a different number so as to avoid duplicating file names. It is convenient when you want to manage your files on a PC.

Memory Type (VP-MX10A/MX10AU/MX10AH only)

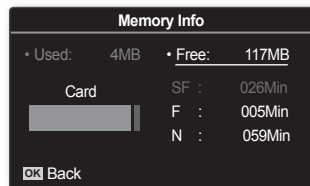
You can record movie files on the built-in memory or a memory card, so you should select the desired storage media before starting recording or playback. ➡ page 32

settings	contents	on-screen display
"Memory"	Select the built-in memory for storage medium. So you can record or play back movie file on the built-in memory.	
"Card"	Select a memory card for storage medium. So you can record or play back movie file on memory card.	

Memory Info

It shows you the storage information. You can view the storage media, used memory space and available memory space, and the recordable time according to the quality.

settings	contents	on-screen display
"Memory"	It shows you the memory information of built-in storage media. (VP-MX10A/MX10AU/MX10AH only)	-
"Card"	It shows you the memory information of the inserted memory card.	-



If there is no storage media inserted, it can not be selected. Then it will be dimmed on the menu.

In case of model VP-MX10/MX10P/MX10H, the information of the memory card appears by selecting **"OK"**.

Format

The format function completely deletes all files and options on the storage media, including protected files. You can format (initialize) recording data in the storage media. You have to format the pre-used storage media or newly purchased memory cards with this memory camcorder before using them. This enables stable speeds and operation when accessing the recording medium.

Be aware that all files and data including protected files will be erased.

settings	contents	on-screen display
"Memory"	Formats the built-in storage media. (VP-MX10A/MX10AU/MX10AH only)	None
"Card"	Formats the memory card.	None



- Make sure to format the recording medium on the memory camcorder.
- Do not remove the recording medium or perform any other operation (such as turning off the power) during format. Also, be sure to use the provided AC power adapter, as the recording medium may be corrupted if the battery becomes exhausted during format. If the recording medium becomes corrupted, format it again.
- A memory card with the protection tab set to lock will not be formatted. ➡page 59
- In case of model VP-MX10/MX10P/MX10H, the format is executed by selecting **"OK"**.



Do not format the recording medium on the PC or a different device.

Make sure to format the recording medium on the memory camcorder.

setting options

Default Set

You can initialize the memory camcorder settings to the factory defaults(initial settings at the factory). Initializing the memory camcorder settings to factory defaults does not affect recorded images.



After resetting the memory camcorder, set **"Date/Time Set"**. ➡page 31

Version

You can see the firmware version information.

Language

You can select a desired language to display the menu and messages. ➡page 30

USB Connect

Connect the memory camcorder to a PC via a USB 2.0 cable and you can transfer your movie images from the storage media, or use this camcorder as a webcam.

settings	contents	on-screen display
"Mass Storage"	Transfers the data files with your memory camcorder and a PC. ➡page 75	None
"PC Cam"	Uses your memory camcorder as a webcam. ➡page 76	None



- The default setting is mass storage.
- Before connecting the USB cable, check if the appropriate USB mode you want to use is selected.

Demo

Demonstration automatically shows you the major features that are included with your memory camcorder so that you may use them more easily.

settings	contents	on-screen display
"Off"	Disables the function	None
"On"	Activates demonstration mode and shows various features on the LCD screen. - After it exit to the menu, the demonstration is automatically operated. - Demonstration mode will resume if you operate any other function in STBY mode for about 6minute.	None



"Auto Power Off " function does not operate during the demonstration mode.

USB interface

This chapter explains how to connect a PC using the USB cable for various actions.

-To connect an USB cable to a PC, refer to the software installation instructions and available PC specification.

SYSTEM REQUIREMENTS

Transferring a Digital Image through a USB Connection

- The memory camcorder supports USB 2.0 High speed. (Depends on the PC specification)
- You can transfer a recorded file in storage media to a PC via a USB connection.
- If you transfer data to a PC, you need to install the software (DV Driver, Video Codec, DirectX 9.0) supplied with the memory camcorder.

USB Connection Speed (depending on the System)

- High speed USB connection is supported by Microsoft (Windows) device drivers only.
- Windows 2000 - High speed USB on a system with Service Pack 4 or later installed.
- Windows XP - High speed USB on a system with Service Pack 1 or later installed.
- Windows Vista - High speed USB on a system with Service Pack 1 or later installed.



System Requirements

Windows operating systems

- CPU: Intel® Pentium 4™, 2GHz or higher, or the equivalent
 - Operating systems: Windows® 2000/XP/Vista
Standard installation is required. If you have upgraded your current operating system, we can not guarantee the proper operation of the product.
 - Memory: 512MB RAM or higher
 - Hard Disk: 2GB or higher
 - Resolution: 1024x768 dots, 24bit colour
 - USB port: USB2.0 High Speed
- System requirements mentioned above are recommendations. Even on a system that satisfies the requirements may not ensure the operation depending on the system.
- This memory camcorder is recognised as a removable storage device on the Macintosh computer.
(Mac OS 10.3 or above supporting the High Speed USB standards)

USB interface



- On a slower PC than recommended, movie playback may not be smooth or video editing may take a long time.
- On a slower PC than recommended, movie playback may skip frames or operate unexpectedly.
- If your OS is Windows 2000/XP/Vista, log in as the Administrator (administrator of the PC) (or a user with the equivalent privileges) to install the software.
- Check out the storage media of the memory camcorder before connecting USB cable. If no memory card or an unformatted memory card is inserted, the PC will not recognize your memory camcorder as a removable disk.
- If you disconnect the USB cable from the PC or the memory camcorder during the data transfer, the data transfer will stop and the data may be damaged.
- If you connect the USB cable to a PC using a USB HUB or with other devices at the same time, it may cause conflict and may not work properly. If this occurs, remove all other USB devices and try the connection again.
- Intel® Pentium III™ or Pentium 4™ is a trademark of the Intel Corporation.
- Windows® is a registered trademark of the Microsoft® Corporation.
- All other brands and names are property of their respective owners.

INSTALLING THE SOFTWARE

Installing DV Media Pro Programme



You need to install DV Media Pro to play back recorded movie files from memory camcorder with the USB cable on your PC. When you install the DV Media Pro software on your Windows computer, you can enjoy the following operations by connecting your memory camcorder to your computer via a USB cable.

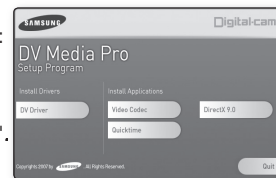
- View movie recordings on PC: **DV Driver - DirectX9.0 - Video Codec**
- Webcam/USB streaming function: **DV Driver - DirectX9.0 - Video Codec**

Before you start!

- Turn on your PC. Exit all other applications running.
 - Insert the provided CD into the CD-ROM drive.
 - The setup screen appears automatically soon after the CD was inserted.
- If the setup screen does not appear, click on "Start" on the bottom left corner and select "Run" to display a dialog. Type "D:\autorun.exe" and then press ENTER, if your CD-ROM drive is mapped to "D: Drive".

Installing Driver - DV Driver and DirectX 9.0

- DV Driver is a software driver that is required to support establishing connection to a PC.
(If it is not installed, some functions will not be supported.)
1. Click on "DV Driver" on the setup screen.
 - Driver software required is installed automatically. Following drivers will be installed:
 - USB PC-CAMERA driver
 - USB streaming driver (USB video transfer)
 2. Click on "Confirm" to finish driver installation.
 3. If the "DirectX 9.0" is not installed, it is installed automatically after setting "DV Driver".
 - After installing DirectX 9.0, PC needs to be restarted.
 - If DirectX 9.0 is installed already, there is no need to restart the PC.



Application Installation - Video Codec

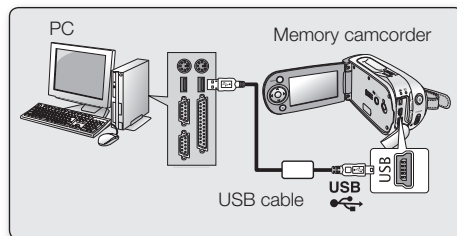
- Click on "Video Codec" on the setup screen.
Video Codec is required to play movie files recorded by this memory camcorder on a PC.

CONNECTING THE USB CABLE

Connect the USB cable to copy movie images in a recording medium to the PC and vice versa.

You can also other various application with USB connection. (PC-camera, storing the data, etc.)

1. Set the **"USB Connect"** to **"Mass Storage."** ➔ page 68
2. Connect the memory camcorder to the PC with a USB cable.



- Don't apply excessive force when inserting or extracting a USB jack.
- Insert a USB jack after checking the direction of its insertion is correct.
- It is recommended to use the AC adapter as the power supply instead of the battery pack.
- When the USB cable is connected, turning on or off the camcorder causes malfunctions of the PC.

Disconnecting the USB cable

Before loading or unloading recording mediums or turning off the PC, first disconnect the USB cable and turn off the memory camcorder.

After completing the data transmission, you must disconnect the cable in the following way:

1. Click the "Unplug or eject hardware" icon on the task tray.
2. Select "USB Mass Storage Device" or "USB Disk," and then click "Stop."
3. Click "OK."
4. Disconnect the USB cable from the memory camcorder and PC.



- If you disconnect the USB cable from the PC or the memory camcorder while transferring, the data transmission will stop and the data may be damaged.
- If you connect the USB cable to a PC via a USB HUB or simultaneously connect the USB cable along with other USB devices, the memory camcorder may not work properly. If this occurs, remove all USB devices from the PC and reconnect the memory camcorder.

```

graph TD
    Root[ ] --- VIDEO[VIDEO]
    Root --- MISC[MISC]
    VIDEO --- 100VIDEO[100VIDEO]
    VIDEO --- SDV0001[SDV_0001.AVI]
    100VIDEO --- SDV0002[SDV_0002.AVI]
    100VIDEO --- Ellipsis[...]
    MISC --- 2[②]
    subgraph 1 [①]
        VIDEO
        100VIDEO
    end
  
```

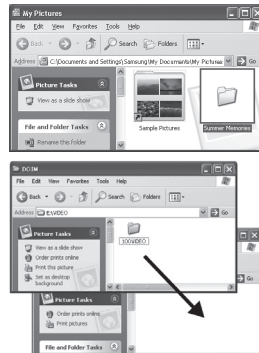



- When the folder number is 999 and the file number is 9,999, you cannot record any file. In this case, format your storage media. (memory card, etc.)
- You may modify the name of a file/folder stored in the memory card using a PC. This memory camcorder may not recognize modified files.

TRANSFERRING FILES FROM THE MEMORY CAMCORDER TO YOUR PC

You can copy the movie image to your PC and play back those.

1. Execute the procedure in "Viewing the contents of storage media." ➡page 74
The folders in the storage media appear.
2. Create a new folder, enter the folder name, and then double-click it.
3. Select the folder to copy, and then drag and drop it into the destination folder.
 - The folder is copied from the storage media to the PC.
 - Saving the wrong kinds of files in a recording medium or deleting files or folders from a recording medium can cause problems with the operation of the memory camcorder. When it is necessary to delete a file from a recording medium, delete it through the memory camcorder. Also, do not move or rename folders and files within the medium on PC.



Playing Back Files on the PC

Movie Images

Use the "DV Media Pro".

- You can install this software from the provided CD.

For more details of "Video Codec". ➡page 71



When playing back a file in the recording medium on your PC, copy the file to your PC, and then play it back. If video file is played back directly from recording medium (i.e. the memory camcorder is connected through USB to your PC), it may be not played back properly due to the inadequate processing speeds or other problems.

USB interface

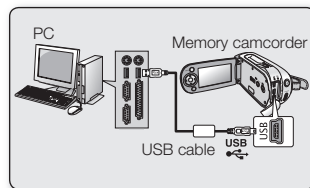
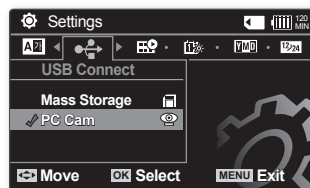
USING THE WEBCAM FUNCTION

You can use your memory camcorder as a webcam for video chatting, video conference and other webcam applications.

Before you start!

For webcam use, it is required to install the DV Driver. ➡page 71

1. Slide the **POWER** switch downward to turn on the memory camcorder.
 - The Movie Record mode screen appears.
2. Press the **MENU** button and select the "**Settings**". ➡page 62
 - The Settings screen appears.
3. Press the **Control** button (◀/▶) to select "**USB Connect**".
4. Press the **Control** button (▲/▼) to select "**PC Cam**" and then press the **OK** button.
5. Turn on your PC.
6. Connect the memory camcorder to your PC with the USB cable.
7. The memory camcorder can be used as a webcam for programmes such as Windows Messenger.
 - Various applications take advantage of the "**PC Cam**" function. Refer to respective product documentation for further details.
 - When finished, disconnect the USB cable.



- It is recommended to use an AC Power Adapter during data transfer to avoid unintended power outages.
- When the USB port connection changed, it may require DV Driver re-installation. ➡page 71
- If you connect more than two USB devices to a single PC or use a hub for USB connection, the webcam function may not work properly.
- You may see a popup message for confirmation of the compatibility, depending on the PC specification. Press "Continue" and follow the on-screen instructions to complete the installation.
- If the DV Media Pro is not properly installed on your PC, during connection, you may see the Found New Hardware Wizard on the screen. Follow the on-screen instructions to complete the installation.

connection

You can view the recorded movie on a large screen by connecting the memory camcorder to a TV.

VIEWING ON TV SCREEN

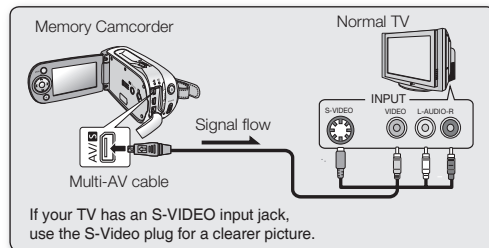
To playback your recordings, the television must be PAL compatible. ➡ page 80

Connecting to a TV

Use the provided multi-AV cable to connect the memory camcorder to a TV as follows:

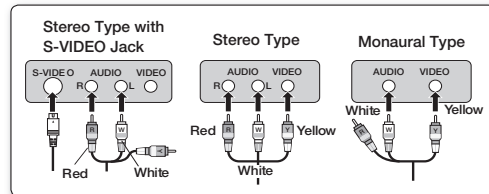
* If your TV has an S-VIDEO input jack, you can connect the S-VIDEO plug into it. Even if you use an S-VIDEO input jack, you need to connect an audio cable.

- Using S-VIDEO will deliver clearer playback.
- Before connecting, make sure that the volume on TV is turned down: forgetting this may cause howling from the TV speakers.
- Carefully connect the input and output cables to the corresponding connections on the device the memory camcorder is being used with.



Viewing on TV Screen

1. Turn on the TV and set the input selector to the Input connection the memory camcorder is connected to. This is often referred to as "line".
 - Refer to the TV instruction manual for how to switch the TV input.
2. Turn the memory camcorder on.
 - Slide the **POWER** switch downward and press the **MODE** button to set Player (). ➡ page 21
 - The image that the memory camcorder is viewing will appear on the TV screen.
 - You can also monitor the image on the LCD screen of the memory camcorder.
3. Perform playback. You can perform playback, recording or setting the menu while viewing on TV screen.



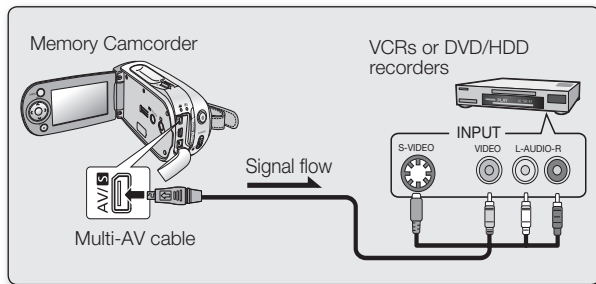
- When the copy-guarded movie is played back, no image will appear on TV screen.
- Information that the memory camcorder is recording will appear on the TV screen: You can also display only part of information or switch off the display. Refer to "TURNING THE SCREEN INDICATORS ON/OFF ()" on page 25, and press the / CHECK button to switch the display status.

connection

RECORDING (DUBBING) IMAGES ON OTHER VIDEO DEVICES

You can record (dub) images played back on this memory camcorder, onto other video devices. Use the multi-AV cable(provided) to connect the memory camcorder to another video device as shown in the following diagram:

1. Press the **MODE** button to set Player(▶).
→page 21
2. Choose the recorded (dubbed) movie on the thumbnail view and then press the **OK** button.
3. Press the record button on the connected device.
 - The memory camcorder will start playback and the recording device will record (dub) it.



- Using S-VIDEO will deliver clearer images.
- Be sure to use the AC adaptor to power the memory camcorder from household AC outlet to prevent battery power from shutting off during recording on another video device.
- You can perform playback in the same manner as when playing back movies on this memory camcorder.

maintenance & additional information

MAINTENANCE

Your memory camcorder is a product of superior design and craftsmanship and should be treated with care.

The suggestions below will help you fulfill any warranty obligations and allow you to enjoy this product for many years.

✪ For safekeeping of the memory camcorder, turn off the memory camcorder.

- Remove the battery pack and AC power adaptor. ➡page 13
- Remove the memory card. ➡page 32

Cautions on Storing

- **Do not leave the memory camcorder in a place where the temperature is very high for a long period of time:**

The temperature inside a closed vehicle or trunk can become very high in a hot season. If you leave the memory camcorder in such a place, it could malfunction or the case could be damaged. Do not expose the memory camcorder to direct sunlight or place it near a heater.

- **Do not store the memory camcorder in a place where the humidity is high or in a dusty place:**
Dust entering the memory camcorder could cause malfunctions. If humidity is high, the lens could become moldy, and the memory camcorder could become inoperative. It is recommended that you put the memory camcorder in a box together with a desiccant when storing it in a closet, etc.
- **Do not store the memory camcorder in a place subject to strong magnetism or intense vibrations:**
This could cause malfunctions.
- **Detach the battery pack from the memory camcorder and store it in a cool place:**
Leaving the battery pack attached or storing it at high temperature could shorten its life.

Cleaning the memory camcorder

✪ **Before cleaning, turn off the memory camcorder and remove the battery pack and AC power adaptor.**

- **To clean the exterior**

Wipe gently with a soft dry cloth. Do not apply excessive force when cleaning, gently rub the surface.

- Do not use benzene or thinner to clean the camcorder. The coating of exterior could peel off or the case could deteriorate.

maintenance & additional information

- **To clean the LCD monitor**

Wipe gently with a soft dry cloth. Be careful not to damage the monitor.

- **To clean the lens**

Use an optional air blower to blow out dirt and other small object. Do not wipe the lens with cloth or your fingers.

If necessary, wipe gently with lens cleaning paper.

- Mold may form if the lens is left dirty.

- If the lens looks dimmer, turn off the memory camcorder and leave it for about 1 hour.

ADDITIONAL INFORMATION

Using your memory camcorder abroad

- **Each country or region has its own electric and colour systems.**

- **Before using your memory camcorder abroad, check the following items.**

- **Power sources**

The provided AC adapter features automatic voltage selection in the AC range from 100 V to 240 V.

You can use your camcorder in any countries/regions using the AC power adaptor supplied with your camcorder within the AC 100 V to 240 V, 50/60 Hz range.

Use a commercially available AC plug adaptor, if necessary, depending on the design of the wall outlet.

- **About TV colour systems**

Your camcorder is an **PAL**-system-based camcorder.

If you want to view your recordings on a TV or to copy it to an external device, it must be an **PAL**-system-based TV or an external device having the appropriate Audio/Video jacks. Otherwise, you may need to use a separate video format transcoder (PAL-NTSC format converter).

- **PAL-Compatible Countries / Regions**

Australia, Austria, Belgium, Bulgaria, China, CIS, Czech Republic, Denmark, Egypt, Finland, France, Germany, Greece, Great Britain, Holland, Hong Kong, Hungary, India, Iran, Iraq, Kuwait, Libya, Malaysia, Mauritius, Norway, Romania, Saudi Arabia, Singapore, Slovak Republic, Spain, Sweden, Switzerland, Syria, Thailand, Tunisia, etc.

- **NTSC-Compatible Countries / Regions**

Bahamas, Canada, Central America, Japan, Mexico, Philippines, Korea, Taiwan, United States of America, etc.

troubleshooting

TROUBLESHOOTING

- ✪ **Before contacting a Samsung authorized service centre, perform the following simple checks. They may save you the time and expense of an unnecessary call.**

Warning indicators and messages

Power source

Message	Informs that...	Action
Low Battery	The battery pack is almost discharged.	Change to a charged one or use AC adaptor. Charge the battery pack.
Auto Power Off	If no button is pressed for about 5 minutes, the memory camcorder is automatically turned off . ("Auto Power Off").	To disable this option, change the setting of "Auto Power Off" to "Off" ➡ page 65

troubleshooting

Storage media

Message	Informs that...	Action
Memory Full	There is not enough space to record on built-in memory.	Delete unnecessary files on the built-in memory. (VP-MX10A/MX10AU/MX10AH) Use a memory card.
Insert Card	There is no memory card inserted in the card slot.	Insert a memory card. Use the built-in memory. (VP-MX10A/MX10AU/MX10AH)
Card Full	There is not enough space to record on memory card.	Delete unnecessary files on the memory card. Use the built-in memory. (VP-MX10A/MX10AU/MX10AH)
Card Error	The memory card is corrupted.	Format the memory card or replace it with a new one.
Not Supported Card	The memory card is not supported in this camcorder.	Change the memory card that we recommended.

Editing files

Message	Informs that...	Action
Not Formatted	The memory card is not formatted.	Format the memory card.

Recording

Message	Informs that...	Action
Not Supported Format	The format is not supported.	The file format is not supported. Check the supported file.



When there is condensation, put aside for a while before using

- What is condensation?

Condensation happens when a memory camcorder is moved to a place where there is a significant temperature difference from the previous place. In other words, the water vapor in the air turns into dew because of the temperature difference, and it condensates like dew on the external or internal lenses of the memory camcorder and on the reflection lens.

When this happens, you temporarily may not use the record or play functions of the memory camcorder. Also, it may cause a malfunction or damage to the memory camcorder when using the device with the power on while there is condensation.

- What can I do?

Turn the power off and detach the battery pack, and leave it in a dry area for 1~2 hours before using it.

- When does the condensation occur?

When the device is relocated to a place with a higher temperature than the previous location, or when using it in a hot area suddenly, it will cause condensation.

- When recording outside in cold weather during the winter and then using it in indoors.
- When recording outside in hot weather after being indoors or inside a car where the AC was running.

Note before sending your camcorder for repair.

- If these instructions do not solve your problem, contact your nearest Samsung authorized service centre.
- Depending on the problem, current hard disk may need to be initialized or replaced and the data will be deleted. Be sure to back up the data on the hard disk on the other storage media before sending your camcorder to repair. Samsung cannot guarantee any loss of your data.

troubleshooting

❗ If you encounter any problem using your camcorder, check the followings before asking for service repair. If these instructions do not solve your problem, contact the nearest Samsung authorized service centre.

Symptoms and solutions

Power

Symptom	Explanation/Solution
The power does not turn on.	<ul style="list-style-type: none">• The battery pack may not be installed on your memory camcorder. Insert a battery pack to the memory camcorder.• The inserted battery pack may be discharged. Charge the battery pack or replace it with a charged one.• If you use an AC power adaptor, make sure it is properly connected to the wall outlet.
The power automatically turns off.	<ul style="list-style-type: none">• Your memory camcorder has been left for more than 5 minutes without any button operation. To turn on your memory camcorder, press the Record start/stop button.• Is "Auto Power Off" set to "On"? If no button is pressed for about 5 minutes, the memory camcorder is automatically turned off ("Auto Power Off"). To disable this option, change the setting of "Auto Power Off" to "Off" ➡ page 65• The battery pack is almost discharged. Charge the battery pack or replace it with a charged one.
Power cannot be turned off .	<ul style="list-style-type: none">• Remove the battery pack or unplug the AC power adaptor, and connect the power supply to the camcorder again before turning it on.
The battery pack is quickly discharged.	<ul style="list-style-type: none">• The temperature in the use condition is too low.• The battery pack is not fully charged. Charge the battery pack again.• The battery pack reached its lifespan and cannot be recharged. Use another battery pack.

Displays

Symptom	Explanation/Solution
The screen of TV or LCD screen displays distorted images.	<ul style="list-style-type: none"> All movies recorded with this memory camcorder have 4:3 aspect ratio. <ul style="list-style-type: none"> It can occur when recording or viewing a 16:9-ratio image on the LCD screen. For more details, see the display specifications. ➡page 55, 61 If you want to display properly on your TV, check out your TV type and set the proper screen mode (4:3 aspect ratio).
Unknown image appears on the LCD screen.	<ul style="list-style-type: none"> The memory camcorder is in "Demo" mode. <ul style="list-style-type: none"> Change the setting "Demo" to "Off". ➡page 68 A warning indicator or message appears on the screen. ➡page 81
The afterimage remains on the LCD screen.	<ul style="list-style-type: none"> This occurs if you disconnect the AC power adaptor or remove the battery pack before turning the power off.
The image on the LCD screen looks dark.	<ul style="list-style-type: none"> Ambient is too bright. Adjust the brightness and angle of LCD.

Menu


Symptom	Explanation/Solution				
Menu items are grayed out.	<ul style="list-style-type: none"> You cannot select grayed items in the current recording/playback mode. There are some functions you cannot activate simultaneously. The following list shows examples of unworkable combinations of functions and menu items. If you want to set the desired functions, do not set the following items first. <table border="0"> <tr> <td><Cannot Use></td> <td><Because of the following setting></td> </tr> <tr> <td>Scene Mode(AE)</td> <td>Exposure (Manual)</td> </tr> </table> Most of menu items cannot be selected when you set the EASY.Q function. If there is no storage media inserted, it can not be selected and will be dimmed on the menu : "Memory Info", "Format", etc. 	< Cannot Use >	< Because of the following setting >	Scene Mode(AE)	Exposure (Manual)
< Cannot Use >	< Because of the following setting >				
Scene Mode(AE)	Exposure (Manual)				

troubleshooting

Recording Media (Memory card, etc)

Symptom	Explanation/Solution
Memory card functions are not operable.	<ul style="list-style-type: none">• Insert a memory card into your camcorder properly. ➡page 33• If you use a memory card formatted on a computer, format it again directly on your camcorder. ➡page 67
Image cannot be deleted.	<ul style="list-style-type: none">• The recorded images are protected. Remove protection from the files and delete them. ➡page 59• You cannot delete the images protected by other device. Release the protection of the image on the device.• Release the lock on the write-protect tab of the memory card (SDHC, standard SD memory card etc), if any. ➡page 34
You cannot format the memory card.	<ul style="list-style-type: none">• Release the lock on the write-protect tab of the memory card (SDHC, standard SD memory card, etc), if any. ➡page 34• Copy any important recorded files to your PC before formatting. Samsung shall not be responsible for any loss of data. (It is recommended that you copy the data to your PC or other storage media.)
The data file name is not indicated correctly.	<ul style="list-style-type: none">• The file may be corrupted.• The file format is not supported by your camcorder.• Only the file name is displayed, if the directory structure does not comply with the international standard.

Recording

Symptom	Explanation/Solution
Pressing the Recording start/stop button does not start recording.	<ul style="list-style-type: none"> • Press the MODE button to set Movie Record mode (). • There is not enough free space to record on the built-in memory or memory card. • Check if the memory card is write-protected or if SDHC memory card is inserted. • The internal temperature of your camcorder is unusually high. Turn off your camcorder and leave it for a while in a cool place. • Your camcorder is damp and moist inside (condensation). Turn off your camcorder and leave it for about 1 hour in a cool place. ➡page 79
The actual recording time is less than the estimated time.	<ul style="list-style-type: none"> • The estimated recording time is calculated by some references. • When you record an object that moves fast, the actual recording time may be shorten.
The recording stops automatically.	<ul style="list-style-type: none"> • If you make a frequent recording or deletion of files, the performance of the built-in flash memory will be deteriorated. In this case, format the built-in memory again.
When recording a subject illuminated by bright light, vertical lines appear.	<ul style="list-style-type: none"> • The memory camcorder is unable to record these levels of brightness.

troubleshooting


Symptom	Explanation/Solution
When the screen is exposed to the direct sunlight during recording, the screen becomes red or black for an instant.	<ul style="list-style-type: none">Do not leave the memory camcorder with the LCD screen exposed to direct sunlight.
During recording, the date/time does not display.	<ul style="list-style-type: none">"Date/Time" is set to "Off". Set the "Date/Time" to "On". ➡page 64
There is a time difference between the point where you press Recording start/stop button and the point where the recorded movie starts/stops.	<ul style="list-style-type: none">On your camcorder, there may be a slight time delay between the point when you press Recording start/stop button and the actual point where the recorded movie starts/stops. This is not an error.
The recording stops.	<ul style="list-style-type: none">The internal temperature of your camcorder is unusually high. Turn off your camcorder and leave it for a while in a cool place.Your camcorder is damp and moist inside (condensation). Turn off your camcorder and leave it for about 1 hour in a cool place. ➡page 79

Adjusting the image during recording

Symptom	Explanation/Solution
Focus does not adjust automatically.	<ul style="list-style-type: none">• Set "Focus" to "Auto". ➡page 53• The recording conditions are not suitable for auto focus. Adjust the focus manually. ➡page 53• The lens is dusty on the surface. Clear the lens and check the focus.• Recording is being made in a dark place. Light up to brighten the place.
The image appears too bright or flickering, or changes in colour.	<ul style="list-style-type: none">• This occurs when recording images under a fluorescent lamp, sodium lamp, or mercury lamp. Cancel "Scene Mode (AE)" to minimize this phenomena. ➡page 48
Colour balance of image is not natural.	<ul style="list-style-type: none">• White balance adjustment is required. Set proper "White Balance". ➡page 49
Unknown indicator appears on the screen.	<ul style="list-style-type: none">• A warning indicator or message appears on the screen.
The backlight function does not function.	<ul style="list-style-type: none">• While recording in EASY.Q mode, the backlight function does not work.

troubleshooting

Playback on your camcorder

Symptom	Explanation/Solution
Pressing the playback (Play/Pause) button would not start playing.	<ul style="list-style-type: none">• Press the MODE button to set Movie Play mode. ()• Image files recorded using other device may not be played on your memory camcorder.• Select a proper recording medium.
The Skip or Search function does not work properly.	<ul style="list-style-type: none">• If the temperature inside the camcorder is too high, it can not function properly. Turn the camcorder off, wait for a few moments, and turn it on again.
Playback is interrupted unexpectedly.	<ul style="list-style-type: none">• Check the AC adaptor or battery pack is properly connected and stable.

Playback on other devices (TV, etc.)

Symptom	Explanation/Solution
You cannot view the image or hear the sound on the connected device.	<ul style="list-style-type: none">• Connect the audio line of the multi-AV cable to your camcorder or to the connected device (TV, DVD recorder, etc). (Red colour- right, White colour- left)• The multi-AV cable is not connected properly. Make sure that the multi-AV cable is connected to the proper jack. ➡page 77• When you are using the S-VIDEO cable, make sure to connect red and white plugs of your multi-AV cable separately since S-VIDEO cable does not support audio. ➡page 77
The image appears distorted on the 16:9 wide TV.	<ul style="list-style-type: none">• All movies recorded with this memory camcorder have 4:3 aspect ratio. So this happens when viewing recorded movies on a 16:9 wide screen TV.• If you want to display properly on your TV, check out your TV type and set the proper screen mode (4:3 aspect ratio).

Connecting/Dubbing with other devices (TV, DVD player, etc)

Symptom	Explanation/Solution
You cannot dub correctly using the multi-AV cable.	<ul style="list-style-type: none">• The multi-AV cable is not connected properly. Make sure that the multi-AV cable is connected to the proper jack, i.e. to the input jack of the device used for dubbing an image from your camcorder. ➡page 78

Connecting to a computer

Symptom	Explanation/Solution
When using the movies, a computer does not recognize your camcorder.	<ul style="list-style-type: none">• Install the provided software programme. ➡page 71• Disconnect the USB device other than the keyboard, the mouse and the camcorder from the computer.• Disconnect the cable from the computer and camcorder, restart the computer, then connect them again correctly.
Cannot play a movie file properly on a PC.	<ul style="list-style-type: none">• A video codec is needed to play the file recorded on your memory camcorder. Install the software provided with your camcorder ➡page 71. Please install by using the software CD that came with this camcorder. We do not guarantee compatibility for different CD versions.• Make sure you insert the connector in the correct direction, and connect the USB cable to the USB jack on your camcorder firmly.• Disconnect the cable from the computer and camcorder, restart the computer. And connect it again properly.
Cannot use the provided software, "DV Media Pro", on the Macintosh computer.	<ul style="list-style-type: none">• You cannot use "DV Media Pro" for a Macintosh computer.• This camcorder is recognized a removable storage device on the Macintosh computer. (Mac OS 10.3 or above supported.)

troubleshooting

Symptom	Explanation/Solution
"DV Media Pro" does not function properly.	<ul style="list-style-type: none">• Exit the "DV Media Pro" programme, and restart the Windows computer.
The image or sound on your camcorder is not played on your computer properly.	<ul style="list-style-type: none">• Movie playback or sound may stop temporarily depending on your computer. The movie or sound copied to your computer is not affected.• If your camcorder is connected to a computer that does not support Hi-speed USB(USB2.0), the images or sound may not be played back correctly. The images and sound is copied to your computer is not affected.
The playback screen is paused or distorted.	<ul style="list-style-type: none">• Check the system requirements to play a movie. ➡page 69• Exit other all applications running on the current computer.

Overall operations

Symptom	Explanation/Solution
The date and time are incorrect.	<ul style="list-style-type: none">• Has the camcorder been left unused for a long period of time? The backup memory battery (button-type battery) may be discharged: replace it with a new one. ➡page 20

specifications

Model Name: VP-MX10/VP-MX10P/VP-MX10H/VP-MX10A/VP-MX10AU/VP-MX10AH

System	
Video signal	PAL
Picture compression format	MPEG4 ASP Format
Audio compression format	ADPCM
Recording quality	Super Fine (about 12Mbps), Fine (about 10Mbps), Normal (about 8Mbps)
Image device	CCD (Charge Coupled Device) (Max/Effective : 800K/350K pixels)
Lens	F1.6 to 4.3, 34x (Optical), 1200x (Digital) Electronic zoom lens
Focal Length	2.3~78.2mm
Minimum Illumination	3.0 Lux
Filter diameter	Ø30
LCD screen	
Size/dot number	2.7 inches wide, 112k
LCD screen method	1.6" interlaced scan, LCD panel/TFT active matrix system
Connectors	
S-Video output	Y:1V (p_p), 75Ω, analog C:0.286Vp_p, 75Ω, analog
Composite video out	1.0V (p_p), 75Ω, analog
Audio output	(-7.5dBm 47KΩ, analog, stereo)
USB output	mini USB-B type (USB2.0 High Speed)
General	
Power source	8.4V (Using AC adapter), 7.4V (Using Lithium Ion battery pack)
Power source type	Power supply (100V~240V) 50/60Hz, Lithium Ion battery pack
Power consumption (LCD on/LCD off)	2.96W, 0.4A / 2.4W (0.3A)
Operating temperature	0°~40°C (32°F~104°F)
Operating humidity	30% ~80%
Storage temperature	-20°C ~ 60°C (-4°F ~ 140°F)
Dimensions (W x H x D)	Approx. 60mm x 62.5mm x 121mm (2.36" x 2.46" x 4.76")
Weight	Approx. 280g (0.61lbs) (expect for battery pack or memory card)
Internal MIC	Omni-directional stereo microphone

These technical specifications and design may be changed without notice.

power sources (united kingdom only)

The plug used on this product is a unitary transformer plug and is designed specifically for this Camcorder it must never be replaced or removed with any other type of plug.



UNITED KINGDOM

This Samsung product is warranted for the period of twelve (12) months from the original date of purchase, against defective materials and workmanship. In the event that warranty service is required, you should return the product to the retailer from whom it was purchased.

However, Samsung Authorised Dealers and Authorised Service Centres in other EC Countries will comply with the warranty on the terms issued to purchasers in the country concerned.

In case of difficulty, details of our Authorised Service Centres are available from:

Samsung Electronics U.K. Ltd.

Customer Care Centre

PO Box 17243

Edinburgh, EH11 4YB

United Kingdom

Tel : 0870 SAMSUNG (7267864),

Fax : 0870 7221127 (United Kingdom)

Tel : 0818 717 100,

Fax : +44 (0)870 7221127 (Republic of Ireland)

Web : www.samsung.com/uk

■ WARRANTY CONDITIONS

1. The warranty is only valid if, when warranty service is required, the warranty card is fully and properly completed and is presented with the original invoice or sales slip or confirmation, and the serial number on the product has not been defaced.
2. Samsung's obligations are limited to the repair or, at its discretion, replacement of the product or the defective part.
3. Warranty repairs must be carried out by Authorised Samsung Dealers or Authorised Service Centres. No re-imbursement will be made for repairs carried out by non Samsung Dealers and, any such repair work and damage to the products caused by



REPUBLIC OF IRELAND

such repair work will not be covered by this warranty.

4. This product is not considered to be defective in materials nor workmanship by reason that it requires adaptation in order to conform to national or local technical or safety standards in force in any Country other than the one for which the product was originally designed and manufactured. This warranty will not cover, and no re-imbursement will be made for such adaptation nor any damage which may result.
5. This warranty covers none of the following:
 - a) Periodic check ups, maintenance and repair or replacement of parts due to normal wear and tear.
 - b) Cost relating to transport, removal or installation of the product.
 - c) Misuse, including the failure to use this product for its normal purposes or incorrect installation.
 - d) Damage caused by Lightning, Water, Fire, Acts of God, War, Public Disturbances, incorrect mains voltage, improper ventilation or any other cause beyond the control of Samsung.
6. This warranty is valid for any person who legally acquired possession of the product during the warranty period.
7. The consumers statutory rights in any applicable national legislation whether against the retailer arising from the purchase contract or otherwise are not affected by this warranty. Unless there is national legislation to the contrary, the rights under this warranty are the consumers sole rights and Samsung, its subsidiaries and distributors shall not be liable for indirect or consequential loss or any damage to records, compact discs, videos or audio taper or any other related equipment or material.

SAMSUNG ELECTRONICS (U.K.) LTD.



ΕΛΛΑΣ (GREECE)

Αγαπητέ πελάτη,

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Εξουσιοδοτημένοι αντιπρόσωποι και εξουσιοδοτημένα κέντρα service σε άλλες Ευρωπαϊκές χώρες, θα αποδεχθούν τους όρους της εγγύησης.

Πληροφορίες για τα εξουσιοδοτημένα κέντρα service στην Ελλάδα, μπορείτε να πάρετε από την

FOURLIS TRADE A.E.B.E.

Λ. Κρυονερίου 112

145 68 Κρυονέρι, Αττικής

Τηλ. 210.629.3100

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1. Η εγγύηση ισχύει εάν και μόνο εάν το προϊόν χρειάζεται service και η κάρτα εγγύησης έχει πλήρως συμπληρωθεί και σφραγισθεί από το κατάστημα αγοράς. Επίσης πρέπει να προσκομισθεί και το τιμολόγιο ή η απόδειξη λιανικής πώλησης, πάνω στην οποία ο σειριακός αριθμός του προϊόντος πρέπει να είναι ευκρινής.
2. Η υποχρέωση της SAMSUNG αφορά μόνο την επισκευή του προϊόντος

3. Η επισκευή του προϊόντος πρέπει να ανατίθεται μόνο σε εξουσιοδοτημένα κέντρα service ή εξουσιοδοτημένους αντιπροσώπους της SAMSUNG. Καμία αποζημίωση δεν θα γίνει αποδεκτή για επισκευή που έχει γίνει από μη εξουσιοδοτημένο από την SAMSUNG συνεργείο.
4. Το προϊόν αυτό δεν θα θεωρηθεί ελαττωματικό στα υλικά ή στην εργασία επισκευής εάν θα πρέπει να προσαρμοστεί, μετατραπεί ή ρυθμιστεί ώστε να συμμορφωθεί με τις τοπικές τεχνικές προδιαγραφές ή προδιαγραφές που ισχύουν σε χώρα άλλη από αυτή για την οποία προοριζόταν ή κατασκευάστηκε. Η εγγύηση αυτή δεν καλύπτει αποζημιώσεις για:
 - * Κεφαλές βίντεο και κασетоφώνων
 - * Κεφαλές βιντεοκάμερας
 - * Γεννήτριες ακτινών laser στα CD, DND
 - * Τηλεχειριστήρια
 - * Λυχνίες φούρνων μικροκυμάτων
 - * Προσαρμογές, μετατροπές ή ρυθμίσεις, ανεξάρτητα αν είναι επιτυχής ή ανεπιτυχής, ούτε οποιαδήποτε ζημία προέρχεται εξ αυτού...

5. Η εγγύηση αυτή δεν καλύπτει καμία από τις παρακάτω περιπτώσεις:

- * Περιοδικούς ελέγχους, συντήρηση και επισκευή ή αντικατάσταση μερών που οφείλονται σε φυσιολογική φθορά
- * Τα έξοδα και τους κινδύνους μεταφοράς που σχετίζονται με την εγγύηση αυτού του προϊόντος

* Ζημία σε αυτό το προϊόν που προέρχεται από:

- A. Κατάχρηση ή και κακή χρήση, συμπεριλαμβανομένης αλλά και μη περιορισμένης σε:
Μη χρήση αυτού του προϊόντος για τους σκοπούς που φυσιολογικά προορίζεται ή σύμφωνα με τις οδηγίες χρήσεως για την σωστή χρήση και συντήρηση αυτού του προϊόντος

Την εγκατάσταση και χρήση του προϊόντος με τρόπους που αντίκεινται στις τεχνικές προδιαγραφές ασφαλείας που ισχύουν κατά την χρήση του προϊόντος

- B. Επισκευή που έγινε από μη εξουσιοδοτημένα συνεργεία service

Γ. Ατυχήματα, θεομηνίες ή οποιαδήποτε αιτία πέρα του ελέγχου της SAMSUNG, συμπεριλαμβανομένων αλλά μη περιορισμένων των κεραυνών, του νερού, της φωτιάς, των δημοσίων αναταραχών, του κακού αερισμού κ.λπ.

- Δ. Η εγγύηση αυτή δεν επηρεάζει τα δικαιώματα του καταναλωτή που προβλέπονται από την εφαρμοστέα εθνική νομοθεσία που ισχύει, ούτε τα δικαιώματα των καταναλωτών εναντίον των λιανοπωλητών που απορρέουν από την σύμβαση πώλησης.

Ε. Σε περίπτωση που δεν υπάρχει εθνική νομοθεσία αυτή η εγγύηση θα είναι η μοναδική και αποκλειστική κάλυψη του καταναλωτή για κάθε ζημία.

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If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre.

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RoHS compliant

Our product complies with "The Restriction Of the use of certain Hazardous Substances in electrical and electronic equipment", and we do not use the 6 hazardous materials- Cadmium(Cd), Lead (Pb), Mercury (Hg), Hexavalent Chromium (Cr +6), Poly Brominated Biphenyls (PBBs), Poly Brominated Diphenyl Ethers(PBDEs)- in our products.

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